
APPENDIXES

- A.—Provisions of Law Relating to the Census of Manufactures
- B.—Census Report Forms and Punch Cards
- C.—Industry Descriptions
- D.—Derivation of 1939 Industry Data Comparable with 1947 Census
Industry Classifications
- E.—Comparison of 1947 Census and Standard Industrial Classification Systems

APPENDIX A

PROVISIONS OF LAW RELATING TO 1947 CENSUS OF MANUFACTURES

[From Fifteenth Census Act, approved June 18, 1929; 46 Stat. 21, 13 U.S.C. 210, 211, 217]

SECTION 17.—That the Director of the Census be, and he is hereby, authorized and directed to collect and publish, for every second year after 1927, statistics of manufacturing industries; and the director is hereby authorized to prepare such schedules as in his judgment may be necessary.

SECTION 10.—That it shall be the duty of every owner, official, agent, person in charge, or assistant to the person in charge, of any company, business, institution, establishment, religious body, or organization of any nature whatsoever, to answer completely and correctly to the best of his knowledge all questions relating to his respective company, business, institution, establishment, religious body, or other organization, or to records or statistics in his official custody, contained on any census schedule prepared by the Director of the Census under the authority of this act, or of the act to provide for a permanent Census Office, approved March 6, 1902, or of acts amendatory thereof or supplemental thereto;

and any person violating the provisions of this section by refusing or willfully neglecting to answer any of said questions shall be guilty of a misdemeanor, and upon conviction thereof shall be fined not exceeding \$500, or imprisoned for a period not exceeding 60 days, or both so fined and imprisoned, and any person violating the provisions of this section by willfully giving answers that are false shall be fined not exceeding \$10,000 or imprisoned for a period not exceeding one year, or both.

SECTION 11.—That the information furnished under the provisions of this act shall be used only for the statistical purposes for which it is supplied. No publication shall be made by the Census Office whereby the data furnished by any particular establishment or individual can be identified, nor shall the Director of the Census permit anyone other than the sworn employees of the Census Office to examine the individual reports.

PROVISIONS OF LAW RELATING TO FUTURE CENSUSES OF MANUFACTURES

[From Public Law 671—80th Congress; 62 Stat. 478, 13 U.S.C. 121]

AN ACT

To provide for the collection and publication of statistical information by the Bureau of the Census

SECTION 1.—That (a) the Director of the Bureau of the Census, hereinafter referred to as the Director and the Bureau, respectively, is authorized and directed to take, compile, and publish the censuses of manufacturers, of mineral industries, and of other businesses, including the distributive trade, service establishments, and transportation (exclusive of means of transportation for which statistics are required by law to be filed with a designated regulatory body), in the year 1949 and every fifth year thereafter, and each such census shall relate to the year

immediately preceding the taking thereof; *Provided*, That the census of manufacturers shall not be taken in 1949. The censuses herein provided for shall include the United States and its Territories and such possessions as may be determined by the Director with the approval of the Secretary of Commerce.

(b) That the Director is further authorized to make such surveys as are deemed necessary to furnish annual and other interim current data on the subjects covered by the censuses provided for in this and other Acts.

APPENDIX B

CENSUS REPORT FORMS AND PUNCH CARDS

The report form shown on pages 663-671, Form MC-33H, is an example of the 208 standard forms used in the 1947 Census of Manufactures. Parts I through VI are the same on nearly all standard forms. Part VII is a special inquiry adapted to the requirements for information on production of commodities by different industries. Part VIII, Section A, which deals with consumption of materials, appears only on selected schedules and is also adapted to the requirements of individual industries. Part VIII, Section B, is included in schedules sent to establishments performing metalworking operations.

The report form shown on pages 676 and 677 of this appendix, Form MC-100A, was sent to small establishments in selected industries. The general inquiries included on this form were greatly abridged, and the product inquiry (Part VII) permitted the

manufacturer to describe his principal products in his own words. Smaller establishments in the lumber and most printing and publishing industries received forms, on which the general inquiries were essentially the same as those on MC-100A, but the product inquiry consisted of a preprinted list suitable to the industry.

The instructions for preparing these reports are also shown below. Instruction MC-1 accompanied the schedules sent to independent manufacturers (owning or operating one manufacturing establishment) and Instruction MC-2 accompanied those sent to multiple-establishment companies (operating two or more manufacturing establishments).

The census punch cards are shown on pages 678 and 679.

<p>THIS INQUIRY IS AUTHORIZED BY ACT OF CONGRESS (46 STAT. 21; 13 USC 201) WHICH REQUIRES THAT YOU FILE A REPORT. The law requires that your report be accorded confidential treatment. Your census report cannot be used for purposes of taxation, investigation, or regulation.</p> <p>FORM MC-33H DEPARTMENT OF COMMERCE BUREAU OF THE CENSUS</p> <h2 style="text-align: center;">CENSUS OF MANUFACTURES:</h2> <h3 style="text-align: center;">1947</h3> <h3 style="text-align: center;">Valves and Fittings</h3> <p>TO: Bureau of the Census, Industry Division, Washington 25, D. C.</p> <p>INSTRUCTIONS</p> <p>Everyone to whom a Census of Manufactures schedule is addressed is required by law to make a return. Complete answers to all questions must be supplied for each manufacturing establishment. You are requested to complete and return this schedule within 30 days after its receipt. If additional time is required, a request for an extension should be addressed to the Director, Bureau of the Census, Washington 25, D. C., stating the reasons for the request and the additional time needed. RETAIN THE GREEN COPY FOR YOUR FILES.</p> <p>If this establishment was not in business or did not operate at any time during the calendar year 1947, explain briefly under "Remarks," execute the certification, and return the schedule immediately.</p> <p>READ ENCLOSED INSTRUCTIONS BEFORE ANSWERING QUESTIONS</p>		<div style="text-align: right;"> <p>CONFIDENTIAL</p> <p>FORM APPROVED BUDGET BUREAU NO. 41-46280</p> </div> <p>IF ADDRESS BELOW IS INCORRECT, PLEASE MAKE CORRECTIONS IN THIS SPACE</p> <p>NAME _____</p> <p>STREET ADDRESS, ROUTE, OR BOX NO. _____</p> <p>CITY _____ ZONE _____ STATE _____</p> <p style="text-align: center;">MC-33H</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="10">FOR CENSUS USE ONLY</th> </tr> <tr> <td>Ind.</td> <td>State</td> <td>County</td> <td>City</td> <td>Area</td> <td>T. E.</td> <td>P. W.</td> <td>V. A.</td> <td>C. O.</td> <td></td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>		FOR CENSUS USE ONLY										Ind.	State	County	City	Area	T. E.	P. W.	V. A.	C. O.											
FOR CENSUS USE ONLY																																	
Ind.	State	County	City	Area	T. E.	P. W.	V. A.	C. O.																									
<p>ITEM 1</p> <p>NAME OF ESTABLISHMENT _____</p>		<p>ITEM 5</p> <p>IS THE COMPANY OPERATING THIS ESTABLISHMENT A SUBSIDIARY OF SOME OTHER COMPANY (that is, is it actually controlled through ownership of voting stock or otherwise)? (Check one)</p> <p><input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>If "YES" is checked, give name and address of parent company: _____</p>																															
<p>ITEM 2</p> <p>LOCATION OF ESTABLISHMENT</p> <p>a. STREET AND NUMBER _____</p> <p>b. CITY, TOWN, VILLAGE, ETC. _____</p> <p>c. COUNTY _____ d. STATE _____</p> <p>e. IS THIS ESTABLISHMENT LOCATED WITHIN PRESENT CORPORATE BOUNDARIES OF CITY, TOWN, OR VILLAGE NAMED? (Check one) <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>f. FEDERAL SOCIAL SECURITY EMPLOYER IDENTIFICATION NO. (As reported on employer's tax return under Federal Insurance Contribution Act, Form SS-1a) _____</p>		<p>ITEM 6</p> <p>DOES THE COMPANY OR OWNER OPERATING THIS ESTABLISHMENT OPERATE ANY OTHER MANUFACTURING ESTABLISHMENTS? (Check one)</p> <p><input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>If "YES" is checked, give name and address of company's general office _____</p>																															
<p>ITEM 3</p> <p>b. REPORTING UNIT NUMBER FOR THIS ESTABLISHMENT (if any) _____</p>		<p>ITEM 7</p> <p>INDICATE BY CHECKING PROPER BOX WHETHER ANY CHANGE OF OWNER OR OPERATOR OF THIS ESTABLISHMENT OCCURRED DURING 1947:</p> <p><input type="checkbox"/> NO CHANGE <input type="checkbox"/> PURCHASED <input type="checkbox"/> SOLD <input type="checkbox"/> LEASED</p> <p>If a change occurred during 1947, give name and address of other owner or operator and the date of change: _____</p>																															
<p>ITEM 4</p> <p>TYPE OF OWNERSHIP (Check one) <input type="checkbox"/> CORPORATION <input type="checkbox"/> INDIVIDUAL PROPRIETOR</p> <p><input type="checkbox"/> PARTNERSHIP <input type="checkbox"/> OTHER (Specify) _____</p> <p>IF INDIVIDUAL PROPRIETOR OR PARTNERSHIP, GIVE NAME OF OWNER OR EACH PARTNER _____</p>		<p style="text-align: right;">DATE OF CHANGE _____</p>																															

PART II—EMPLOYMENT AND PAYROLLS

ITEM
8

ANALYSIS OF PAYROLL ENDED NEAREST OCTOBER 15, 1947—Persons employed include only those employees attached to the manufacturing establishment covered by this report. When this report is for one of several manufacturing establishments operated by the same concern, the employees attached to the general administrative office of this concern should not be reported on this form.

DEFINITIONS

Item 8a.—**PRODUCTION AND RELATED WORKERS**.—Report working foremen and all non-supervisory workers (including lead men and trainees) engaged in fabricating, processing, assembling, inspection, receiving, storage, handling, packing, warehousing, shipping, packaging, repair, janitorial, watchman services, product development, maintenance, and plant's own use (e. g., power plant), and record-keeping and other services closely associated with the above production operations. Exclude supervisory employees above the working-foreman level and their clerical staffs.

Item 8b.—**FORCE-ACCOUNT CONSTRUCTION WORKERS**.—Report employees on your payroll engaged in construction of major additions or alterations to the plant who are utilized as a separate work unit. Do not include workers engaged in regular maintenance and repair operations who should be reported in item 8a.

Item 8c(1).—**CLERICAL, ROUTINE OFFICE WORKERS, ETC.**—Include clerks, typists, stenographers, bookkeepers, and other employees performing routine office functions. Hereafter, the term "clerical" shall be used to designate those employees for the purposes of the Fair Labor Standards Act who are classified under the provisions of that Act.

Item 8c(2).—**ALL OTHER EMPLOYEES**.—Report all employees not classified in any one of the above categories. This will include employees engaged in executive, purchasing, finance, legal, personnel (including cafeteria, medical, etc.), professional, and technical activities, sales, sales delivery (including driver-salesmen), advertising, credit, collection, installation and servicing of establishment's product, and factory supervision above the working-foreman level. Where manufacturers have classified their employees for purposes of the Fair Labor Standards Act and have reported subject employees in 8c(1), report here employees exempt from the minimum wage and overtime provisions of that Act.

PAY PERIOD ENDED NEAREST OCTOBER 15, 1947

C

CLASS OF EMPLOYEE

Number of Persons Employed During Pay Period

Wages and Salaries Earned During the Pay Period
(Use Definition Under Item 9, but Exclude Pay Not Earned in This Period, Such as Retroactive Pay and Non-Production Bonuses)
(Enter Amount Paid in Column Indicating Length of Pay Period Used)
(Omit Cents)

CLASS OF EMPLOYEE	Males (B)	Females (C)	Total (D)	Weekly (E)	Bi-Weekly (F)	Semi-Monthly (G)	Monthly (H)	DO NOT USE
(A)								
a. PRODUCTION AND RELATED WORKERS.				\$	\$	\$	\$	
b. FORCE-ACCOUNT CONSTRUCTION WORKERS.				\$	\$	\$	\$	
c. ADMINISTRATIVE SUPERVISORY SALES, TECHNICAL OFFICE, & ALL OTHER PERSONNEL (Not included above)				\$	\$	\$	\$	
(1) Clerical, Routine Office Workers, etc.				x x x x x x x x	x x x x x x x x	x x x x x x x x	x x x x x x x x	x x x x x x x x
(2) All Other Employees.				x x x x x x x x	x x x x x x x x	x x x x x x x x	x x x x x x x x	x x x x x x x x
d. TOTAL, ALL EMPLOYEES (Sum of a, b, c(1) and c(2))				x x x x x x x x	x x x x x x x x	x x x x x x x x	x x x x x x x x	x x x x x x x x

TOTAL WAGES AND SALARIES FOR THE YEAR 1947—Report for the full year the wages and salaries paid to each class of employees listed below. Wages and salaries are defined as the gross earnings of employees, including commissions, dismissal pay, nonproduction bonuses, vacation and sick leave pay,

and compensation in kind, and prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds.

CLASS OF EMPLOYEE

D

Total Wages and Salaries Paid During 1947
(Omit cents)

A-2

a. PRODUCTION AND RELATED WORKERS (As defined in item 8a above)

b. FORCE-ACCOUNT CONSTRUCTION WORKERS (As defined in item 8b above)

c. ADMINISTRATIVE, SUPERVISORY, SALES, TECHNICAL OFFICE, AND ALL OTHER PERSONNEL (Total of employees as defined in items 8-c(1) and 8-c(2) above)

d. TOTAL, ALL EMPLOYEES (Sum of a, b, and c)

A-3

ITEM
9

ITEM	TOTAL NUMBER OF EMPLOYEES AND NUMBER OF PRODUCTION WORKERS, BY MONTH				E		F		F	
	a. TOTAL EMPLOYEES.—Report total number of employees attached to this manufacturing establishment who worked or received pay for any part of the pay period ended nearest the 15th of each month. (This figure reported for October should be identical to that reported in item 8d, column (D).)				Total Employees (B)		Production Workers (C)		Total Employees (B)	
	b. PRODUCTION WORKERS.—Report number of production and related workers, as defined in item 8a, who worked or received pay for any part of the pay period ended nearest the 15th of each month. (The figure reported for October should be identical to that reported in item 8a, column (D).)				Total Employees (B)		Production Workers (C)		Total Employees (B)	
	Enter "O" or "none" for any pay period for which there were no employees or production workers.				Pay Period Ended Nearest 15th of—		Pay Period Ended Nearest 15th of—		Pay Period Ended Nearest 15th of—	
	DO NOT USE				A-4		A-5		A-6	
ITEM 10	MAN-HOURS, BY QUARTER, OF PRODUCTION AND RELATED WORKERS.—Report the total number of man-hours actually worked in 1947 by production and related workers as defined in item 8a. A man-hour is one hour of work by one person regardless of whether on straight time or overtime. Either calendar quarters or 13-week periods may be used. Each quarterly figure reported here should be a total for the entire quarterly period, and "total 1947" should account for all man-hours worked by Production and Related Workers for the entire year 1947.				Quarterly Period Nearest		Total Production Workers' Man-hours (Omit Fractions)		Total Production Workers' Man-hours (Omit Fractions)	
ITEM 11					JAN. FEB. MARCH APRIL MAY JUNE		JULY AUG. SEPT. OCT. NOV. DEC.			
PART III—MATERIALS, FUEL, AND ELECTRIC ENERGY										
ITEM 12	MATERIALS, FUEL, ETC., CONSUMED DURING ENTIRE YEAR 1947.—Report actual amounts consumed or put into production. Do not include goods resold in the same form as purchased.				G		H		H	
					Quantity (A)		Cost (Omit Cents) (B)			
	a. MATERIALS, PARTS, CONTAINERS, AND SUPPLIES (except fuels).....				x x x x x x x x x x x x x x x x		\$			
	b. FUEL FOR ALL PURPOSES (report quantities in units specified; report total cost, not cost per unit).....				Short Tons.....		\$			
	(1) Coal, bituminous (soft, including lignite).....				Short Tons.....		\$			
	(2) Coal, anthracite (hard).....				Short Tons.....		\$			
	(3) Coke.....				Short Tons.....		\$			
	(4) Fuel oil (including heating oils, but not including gasoline or lubricants).....				Bbl. (42 Gal.).....		\$			
	(5) Gas (Check kind) <input type="checkbox"/> NATURAL <input type="checkbox"/> MANUFACTURED <input type="checkbox"/> MIXED <input type="checkbox"/> GH 1.....				M. cu. ft.....		\$			
	(6) Other fuels.....				Kw. hrs.....		\$			
	c. ELECTRIC ENERGY PURCHASED.....				Kw. hrs.....		\$			
	d. TOTAL (Sum of a through c).....				x x x x x x x x x x x x x x x x		\$			
ITEM 13	COST OF CONTRACT AND COMMISSION WORK DONE FOR YOU OUTSIDE YOUR ESTABLISHMENT DURING 1947 ON MATERIALS SUPPLIED OR OWNED BY YOU IN THE MANUFACTURE OF PRODUCTS REPORTED IN PART VII.....				H \$		B-1		DO NOT USE	
ITEM 14	ELECTRIC ENERGY GENERATED AND SOLD				H Kw. hrs		x x x x x x x x x x x x x x x x		(Omit Cents)	
	a. DID YOU GENERATE ANY ELECTRIC ENERGY DURING 1947? (Check one) <input type="checkbox"/> YES <input type="checkbox"/> NO				H		x x x x x x x x x x x x x x x x		(Omit Cents)	
	If "YES" is checked, report net generation (gross less that used for operation of power plant).....				H		x x x x x x x x x x x x x x x x		(Omit Cents)	
	b. DID YOU SELL ANY ELECTRIC ENERGY DURING 1947? (Check one) <input type="checkbox"/> YES <input type="checkbox"/> NO				H		x x x x x x x x x x x x x x x x		(Omit Cents)	
	If "YES" is checked, report the quantity sold and its value.....				H		x x x x x x x x x x x x x x x x		(Omit Cents)	
PART IV—INVENTORIES										
Report all inventories wherever located, for the account of this establishment. Include goods owned by you, but held by others. Do not include goods held by you, but owned by others.					BEGINNING OF YEAR		END OF YEAR			
					(SPECIFY DATE ABOVE) (Omit Cents) (A)		(SPECIFY DATE ABOVE) (Omit Cents) (B)			
ITEM 15	a. INVENTORIES OF FINISHED PRODUCTS OF THIS ESTABLISHMENT.....				B \$		B \$		B \$	
	b. MATERIALS, SUPPLIES, WORK IN PROCESS, FUEL, AND ALL OTHER INVENTORIES.....				B \$		B \$		B \$	
	c. TOTAL INVENTORIES (sum of a and b).....				(B) \$		(B) \$		(B) \$	

FORM MC-33H

PART V—EXPENDITURES FOR PLANT AND EQUIPMENT

Expenditures refer to all costs actually incurred during 1947 chargeable to equipment, land, and "used" plant and equipment acquired from others. Expenditures are equal to additions completed during the year, plus construction-in-progress at the end of the year, minus construction-in-progress at the beginning of the year. Do not include costs incurred for maintenance and repairs.

DID YOU MAKE ANY EXPENDITURES OF THE KIND DESCRIBED ABOVE DURING 1947? (Check one) ☐ YES ☐ NO If "YES" is checked, supply the following figures:

a. EXPENDITURES FOR NEW CONSTRUCTION, MAJOR ALTERATIONS OF BUILDINGS AND OTHER FIXED PLANTS AND STRUCTURES: AMOUNT OF EXPENDITURES (Omit Cents) \$

(1) BUILDINGS—Include such facilities as new elevators, cranes, heating and ventilating equipment, etc., when they are essentially a part of the buildings..... \$

(2) OTHER CONSTRUCTION—Include site improvements such as roads, docks, tracks, parking lots, fences, utilities, etc., also include fixed structures such as new construction and major alterations of blast furnaces, brick kilns, fractionalizing towers, shipways, and similar types of structure..... \$

(3) TOTAL (Sum of a(1) and a(2))..... \$

b. EXPENDITURES FOR NEW MACHINERY AND EQUIPMENT:

(1) PRODUCTION MACHINERY AND EQUIPMENT—Include all new motors, lathes, punch presses and similar machines and equipment for use in production..... \$

(2) OTHER MACHINERY AND EQUIPMENT—Include all new office machines and fixtures furniture, cafeteria and dressing room furnishings, automobiles and trucks and other similar equipment..... \$

(3) TOTAL (Sum of b(1) and b(2))..... \$

c. EXPENDITURES FOR LAND ACQUIRED..... \$

d. OTHER EXPENDITURES CHARGEABLE TO PROPERTY ACCOUNT—Include plant and equipment acquired in a "used" condition from others (including government), and other expenditures for fixed assets not included above..... \$

e. TOTAL EXPENDITURES (Sum of expenditures shown in a(3), b(3), c and d)..... \$

PART VI—HIGHWAY-TYPE MOTOR VEHICLES

Did you operate (either through ownership or lease) any highway-type motor vehicles as of December 31, 1947? (Check one) ☐ YES ☐ NO If "YES" is checked, supply the following figures:

NUMBER OF MOTOR VEHICLES OPERATED (EITHER BY OWNERSHIP OR LEASE) AS OF DEC. 31, 1947 (EXCLUDE PASSENGER CARS, BUSES & INDUSTRIAL TRACTORS):

ITEM	KIND OF VEHICLE	NUMBER OF HIGHWAY-TYPE MOTOR VEHICLES BY MANUFACTURER'S RATED CAPACITY						Total
		Under 1½ Tons (B)	1½ Tons (C)	Over 1½ Tons, Less Than 3½ Tons (D)	3½ Tons Less Than 5 Tons (E)	5 Tons Less Than 7 Tons (F)	7 Tons and Over (G)	
17	a. TRUCKS, BY BODY TYPE							
	(1) Van.....	1						
	(2) Stake or platform.....	2						
	(3) Panel or light delivery.....	3						
	(4) All other body types.....	4						
	b. TRUCK TRACTORS.....	5						
18	c. TRAILERS AND SEMI-TRAILERS.....	6						
19	NUMBER OF TANK-TYPE BODIES INCLUDED IN ABOVE TRUCKS AND TRAILERS.....	7						
	NUMBER OF REFRIGERATED-TYPE BODIES INCLUDED IN ABOVE TRUCKS AND TRAILERS.....	8						

Part VII—PRODUCTS SHIPPED AND RECEIPTS FROM OTHER MANUFACTURING ACTIVITIES DURING 1947

ITEM
20

SHIPMENTS: This inquiry should account for all products shipped during 1947 from the establishment covered by this report. Figures may be based on records of sales, shipments, or billings, whichever most closely approximates the physical movement of products out of this plant. Do not include shipments of products purchased and resold in the same condition. Include products transferred to other establishments of your company as well as products shipped to your customers. Include products shipped on consignment, whether or not sold at the end of the year.

For value of shipments, report the net selling value at the factory or plant

of the total quantity of each product listed. This value should approximate as nearly as possible the actual amounts received or receivable by you for shipments made during the year. The reported figures should represent values f. o. b. plant after discounts and allowances and should not include freight charges and excise taxes. For products transferred to other establishments of your company (such as other manufacturing plants, separate sales departments, sales branches, retail stores, etc.). "value" should be the nearest approximation to the net selling value of the products, that is, the value that would have been realized if the products had been sold f. o. b. plant.

ITEM	PRODUCT (A)	DO NOT USE Code	UNIT OF MEASURE (B)	TOTAL SHIPMENTS AND INTERPLANT TRANSFERS	
				QUANTITY (C)	VALUE F. O. B. PLANT (Omit cents) (D)
	VALVES, FITTINGS, AND PIPING SPECIALTIES FOR PIPING SYSTEMS EXCEPT PLUMBING AND HEATING VALVES:				
	Metal valves:				
	Gates, globes, angles, checks, butterfly, lubricated plug, cocks, stop and checks, cross, etc. (except automatic regulating valves):				
(1)	Iron (all pressures), including fire hydrants.....	359101	Short ton.....		\$.....
(2)	Steel, carbon and alloy (all pressures).....	359102	Short ton.....		\$.....
(3)	Brass and bronze (125 lb. W. S. P. and over).....	359103	Short ton.....		\$.....
	Pop safety valves and relief valves (over 15 lb. W. S. P.):				
(4)	Iron.....	359104	Short ton.....		\$.....
(5)	Steel, carbon and alloy.....	359105	Short ton.....		\$.....
(6)	Brass and bronze.....	359106	Short ton.....		\$.....
(7)	Steel turbine valves.....	359107	Short ton.....		\$.....
	Automatic regulating valves:				
(8)	Diaphragm actuated.....	359108	Number of units.....		\$.....
(9)	Float actuated, including float cages.....	359109	Number of units.....		\$.....
(10)	Other automatic regulating valves.....	359110	Number of units.....		\$.....
(11)	Compressed gas cylinder valves.....	359111	Number of units.....		\$.....
	Metal fittings and unions (Exclude compression fittings flared fittings and bell and spigot pressure and soil pipe fittings):				
(12)	Gray iron fittings, flanges, and flange unions.....	359112	Short ton.....		\$.....
(13)	Malleable iron fittings and flanges.....	359113	Short ton.....		\$.....
(14)	Malleable iron unions and union fittings.....	359114	Short ton.....		\$.....
(15)	Cast and forged carbon and alloy steel fittings, flanges, and unions.....	359115	Short ton.....		\$.....
(16)	Cast and wrought copper and copper-base alloy fittings, flanges, and unions.....	359116	Short ton.....		\$.....
	Steam traps (over 15 lb. W. S. P.):				
(17)	Thermostatic.....	359117	Number of units.....		\$.....
(18)	Float and thermostatic.....	359118	Number of units.....		\$.....
(19)	Mechanical.....	359119	Number of units.....		\$.....

(20)	Other metal valves and piping specialties for piping systems, except plumbing and heating valves (Specify kind and pressure):	359120	Short ton.	\$
(21)	PLUMBING AND HEATING VALVES AND SPECIALTIES:	359120:	Short ton.	\$
(22)	Gates, globes, angles, checks, butterfly, lubricated plug, cocks, stop and checks, cross, etc.—brass and bronze valves (under, 125 lb. W. S. P.):	359121	Short ton.	\$
(23)	Pop safety valves and relief valves (15 lb. W. S. P. and under):	359122	Short ton.	\$
(24)	Iron:	359123	Short ton.	\$
(25)	Steel, carbon and alloy:	359124	Short ton.	\$
(26)	Brass and bronze:	359125	Number of units.	\$
(27)	Steam traps (15 lb. W. S. P. and under):	359126	Number of units.	\$
(28)	Radiator traps:	359127	Short ton.	\$
(29)	Other steam traps (15 lb. W. S. P. and under):	359127:	Short ton.	\$
(30)	Other metal plumbing and heating valves and specialties (Specify kind and pressure):	359128	Short ton.	\$
(31)	OTHER METAL VALVES (Specify kind and pressure):	359128:	Short ton.	\$
(32)	THERMOMETERS (Specify whether industrial and laboratory, clinical or household):	3821	Number of units.	\$
(33)	ALL OTHER PRODUCTS (Specify kind and unit of measure):			\$
(34)				\$
(35)				\$
(36)				\$
(37)	RECEIPTS FROM OTHER MANUFACTURING ACTIVITIES:			\$
(38)	Scrap and salable refuse:	910000	X X X X X X X X	X X X X X X X X
(39)	Receipts for repair work:	920000	X X X X X X X X	X X X X X X X X
(40)	Receipts for contract and commission work on materials owned by others:	930000	X X X X X X X X	X X X X X X X X
(41)	TOTAL (Sum of lines 1 through 40):		X X X X X X X X	A-7
DO NOT USE.	A-8			

(PLEASE CONTINUE ON SEPARATE SHEET)

FOR CENSUS USE ONLY

Form MC-33H
(Continued)

CENSUS OF MANUFACTURES: 1947

VALVES AND FITTINGS

NAME OF ESTABLISHMENT
(Same as item 1)Establishment
Identification No.

Ind. State County City Area T. E. P. W. V. A. C. O.

PART VIII - MATERIALS USED AND METALWORKING OPERATIONS PERFORMED

SECTION A - MATERIALS USED

ITEM
21

This inquiry is designed to obtain your consumption of selected metal shapes during 1947, if your consumption exceeded certain specified quantity limits. For each metal shape listed in column (A), check either in column (C) or (D) if your consumption in 1947 was less than the "quantity limit" specified in column (B). If your consumption in 1947 equaled or exceeded the "quantity limit" specified in column (B), report in columns (E) and (F) the quantity and inventory changes.

cost of the material actually consumed or put into production (whether purchased, transferred from other establishments, or withdrawn from inventories). Do not include materials, such as castings, both made and consumed at this establishment during 1947. If you do not maintain actual book records on the quantity and cost of materials consumed, you may report receipts during 1947 adjusted for estimated inventory changes.

MATERIAL	(A)	SPECIFIED QUANTITY LIMIT	(B)	IF YOU CONSUMED NONE OF THE MATERIAL SPECIFIED, CHECK IN THIS COLUMN	(C)	IF YOU CONSUMED SOME, BUT LESS THAN QUANTITY SPECIFIED IN COLUMN (B), CHECK IN THIS COLUMN	(D)	DO NOT USE	IF YOU CONSUMED MORE THAN QUANTITY SPECIFIED IN COLUMN (B)	
									Quantity (E)	Cost (F) (Omit Cents)
(1) IRON CASTINGS, rough and semi-finished (received from foundry).....	50 short tons	<input type="checkbox"/>	<input type="checkbox"/>	870	tons	\$	
(2) STEEL CASTINGS, rough and semi-finished (received from foundry).....	50 short tons	<input type="checkbox"/>	<input type="checkbox"/>	871	tons	\$	
STEEL MILL SHAPES AND FORMS										
(3) Carbon steel Bars and bar shapes.....	50 short tons	<input type="checkbox"/>	<input type="checkbox"/>	872	tons	\$	
(4) Sheet and strip.....	50 short tons	<input type="checkbox"/>	<input type="checkbox"/>	873	tons	\$	
(5) Structural shapes.....	50 short tons	<input type="checkbox"/>	<input type="checkbox"/>	874	tons	\$	
(6) Plates.....	50 short tons	<input type="checkbox"/>	<input type="checkbox"/>	875	tons	\$	
(7) Wire.....	50 short tons	<input type="checkbox"/>	<input type="checkbox"/>	876	tons	\$	
(8) All other mill shapes and forms.....	50 short tons	<input type="checkbox"/>	<input type="checkbox"/>	877	tons	\$	
Alloy steel, except stainless										
(9) Bars and bar shapes.....	25 short tons	<input type="checkbox"/>	<input type="checkbox"/>	878	tons	\$	
(10) All other mill shapes and forms.....	25 short tons	<input type="checkbox"/>	<input type="checkbox"/>	879	tons	\$	
(11) Stainless steel.....	20,000 pounds	<input type="checkbox"/>	<input type="checkbox"/>	880	lbs.	\$	

<div data-bbox="178 1840 206 1904">ITEM 22</div> <div data-bbox="178 1202 272 1819"> <div data-bbox="178 1202 206 1819">(11) PLATE OR STRUCTURAL FABRICATION.....</div> <div data-bbox="239 1202 272 1819">(12) STAMPING, BLANKING, FORMING OR DRAWING.....</div> </div>	<div data-bbox="297 829 322 1095">PART IX--OMITTED</div>	<div data-bbox="363 819 388 1085">PART X--REMARKS</div>	<div data-bbox="413 1840 437 1904">ITEM 23</div>	<div data-bbox="1247 1819 1272 1904">ITEM 24</div> <div data-bbox="1239 893 1263 1095">CERTIFICATION</div> <div data-bbox="1280 202 1354 1776"> <p>The undersigned certifies that the information contained in this report is substantially correct and complete to the best of his knowledge and belief, and covers the operations of this establishment from _____ to _____</p> </div> <div data-bbox="1379 244 1428 1744"> <p>By _____ (NAME OF COMPANY) _____ (SIGNATURE OF AUTHORIZED OFFICIAL)</p> </div> <div data-bbox="1453 244 1486 1744"> <p>_____ (DATE) _____ (TITLE)</p> </div>
--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------	---------------------------------------------------------	--------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

U. S. DEPARTMENT OF COMMERCE

W. AVERELL HARRIMAN, *Secretary*

BUREAU OF THE CENSUS

J. C. CAPT, *Director*

MC-1

1947 CENSUS OF MANUFACTURES

General Instructions to Manufacturers for Preparing Reports

A. Who Should Report?

Every manufacturer is required by law to make a separate return on a Census of Manufactures schedule for each manufacturing establishment he operated for any part of the calendar year 1947. If the name and address shown on the enclosed report form is incorrect, make the necessary change and fill in the form.

B. What Is a Manufacturing Establishment?

A manufacturing establishment, for the purpose of this report, is defined as a plant, mill, factory, shop, or works at a single physical location and engaged in one line of manufacture. A company or business unit often includes more than one establishment. Where a single physical location comprises two or more units, divisions or departments, that are engaged in different lines of manufacturing, processing, or assembling, and maintain separate payroll and inventory records, each such unit is an establishment for which a separate report must be prepared. If additional forms are required, please write to the Bureau of the Census indicating the type of manufacturing activity which is not covered by the forms sent you. The figures given in one report must not duplicate those given in another. Units at different physical locations, even though engaged in the same line of manufacturing, processing, and assembling, should be reported as separate establishments. This does not mean that the activities in each building should be reported separately when an establishment consists of more than one building used in the same line of manufacture at the same location.

C. What Kind of Activities Should This Report Cover?

The report should cover all of this establishment's production activities (manufacturing, fabricating, processing, and assembling). It should also include activities auxiliary to the operations of this establishment, such as the generation of power for the plant, maintenance of plant and equipment, receiving, shipping, warehousing, storage, and services closely associated with the foregoing activities, such as record keeping, health, safety, cafeteria, and others. It should exclude sales branches, retail stores, and central administrative offices operated as units separate from the manufacturing establishment. The activities of concessionaires operating on the plant premises should also be excluded.

D. Is it Necessary to Answer Every Question?

Yes. Complete answers to all questions are required. It will be necessary to obtain missing information from you by correspondence. If a particular question does not apply to your business, indicate this by entering "none," or "0" after the question or by explaining briefly in the "Remarks" space provided at the end of the report form.

If your books do not contain the exact information needed to answer particular questions, carefully prepared estimates will be accepted for these questions.

E. What Period Should This Report Cover?

This report should cover the calendar year 1947. If your book records are not on a calendar-year basis, carefully prepared estimates for this period will be accepted. If, however, this procedure will involve you in considerable additional costs, please write to the Bureau stating your fiscal-year period, explaining your reporting problems in detail, and we shall let you know whether an exception can be made.

If this establishment began to operate or ceased to operate within the year, the dates given in the certification should show the exact period for which this report is made. If the establishment was operated during the early part of the year under other management, make the report for the entire year if the records are available.

PART I. ESTABLISHMENT DESCRIPTION

Item 1. Name of Establishment.—Enter the name under which this establishment does business. If it is one of several establishments doing business under the same name, also give the name or number by which it is distinguished from the other establishments of the same company. For example: Acme Steel Co., Centerville Plant. If it is one of several establishments at the same address, indicate type of activity; for example, Acme Textile Co., Third Street Mill, Finishing Department.

Item 2. Establishment Location.—This item relates to the physical location of the establishment, which may differ from the place at which mail is received. If the boundary of an incorporated municipality (city, borough, town, or village) runs through the establishment, answer "Yes" to item 2e. If the establishment is not in an incorporated municipality, enter on line "b" the name of the "town" in the New England States, or township or similar subdivision of the county in other states, in which it is located. If the name of the county subdivision is not known, enter on line "b" the name or number of the street or highway upon which the establishment is located and its distance and direction from the nearest municipality: (for example, State Highway No. 26, 10 miles northeast of Frederick).

Item 3. Federal Social Security Employer Identification Number.—Report on line "a" the identification number assigned to your establishment by the Federal Security Agency for identifying your Quarterly Old Age and Survivors Insurance tax payments to the Bureau of Internal Revenue. Line "b" refers to the reporting unit number, if any, used in reporting to the Federal Security Agency for purposes of identifying each unit of a multi-unit organization. Do not report your State unemployment insurance account number.

Item 5. Is the Company Operating This Establishment a Subsidiary of Some Other Company?—If the reporting company is a subsidiary of another company, answer "Yes," even though the parent company may not be directly engaged in manufacturing. Subsidiary is defined for the purpose of this report as meaning control over the policies and activities

of the company as generally evidenced by ownership of voting stock, trust agreements, etc.

Item 6. *Does the Company or Owner Operating This Establishment Operate Any Other Manufacturing Establishment or Establishments?*—If the company or owner operates two or more manufacturing establishments as defined in paragraph B, of these instructions, your answer to this question should be "Yes." Companies which operate only one manufacturing establishment should answer "No," even though they maintain separate wholesale, retail, repair or other non-manufacturing establishments.

Item 7. *Change in Owner or Operator During 1947.*—If there has been a change in the owner or operator, please give the present address (personal or business) of an official or one or more owners of the predecessor company. See also paragraph E of these instructions.

PART II. EMPLOYMENT AND PAYROLLS

Item 8. *Class of Employee.*—Report each employee covered by this report in one class and one only. If an employee performed work in more than one class during the pay period, report him in the class in which his principal duties fell. Note the definitions in the heading to Part II, Item 8.

Items 8 and 9. *Wages and Salaries.*—For item 9 the definition of wages and salaries is the same as that used for calculating the withholding tax.

In reporting wages and salaries for the October payroll period (item 8) the definition should be the same as that used in item 9, except that you should exclude retroactive pay and non-production bonuses. Report in more than one column only if employees in a particular class were paid by different pay periods.

Item 10. *Employees and Production Workers, by Month.*—Total employees: Note that the inclusions and exclusions of types of workers are the same as specified by your State Unemployment Compensation Agency. Production workers: Note that the inclusions and exclusions of types of workers are the same as specified by the Bureau of Labor Statistics.

Item 11. *Man-hours, by Quarter, of Production and Related Workers.*—If your payroll period runs from one of the periods specified on the form into the next, distribute the man-hours between these two periods. Man-hours do not include hours paid for but not worked.

PART III. MATERIALS, FUEL, AND ELECTRIC ENERGY

General.—Report total amounts of materials, supplies, semi-finished goods, fuels, etc., actually consumed or put into production by this establishment during 1947. Include items consumed during the year even though purchased prior to 1947, but do not include items received during the year which were not consumed. Include materials and supplies consumed for maintenance and repair of your plant and equipment as well as for production. However, do not include materials, supplies, machinery, and equipment used in the construction of your plant and equipment and chargeable to fixed assets account. (The cost of such items should

be included in the figures reported in Part V.) Include materials, etc., owned by you but consumed by others in making products for you. Do not include materials consumed by you but owned by others.

If your records do not show actual amounts consumed or put into production during the year, the consumption may be computed from your records of purchases (or receipts) and inventories of materials. Add amounts received during the year to the amounts on hand at the beginning of the year and then subtract the amounts on hand at the end of the year.

"Cost," as used in this inquiry, refers to amounts actually paid or payable for items consumed or put into production during the year. For this reason, it should represent the cost after discounts, and should include freight charges and other direct charges incurred by you in acquiring these materials, etc.

Item 12 a. *Materials, Parts, Containers, and Supplies (except fuels).*—Report the total delivered cost of all raw materials, semi-finished goods, parts, components, containers, scrap, and supplies consumed or put into production during 1947. For semi-finished goods, parts, or components produced and incorporated into finished manufactures at the same plant, report the cost of the raw materials used in their manufacture rather than the cost of intermediate products themselves.

Item 12-b (6). *Other fuels,* include gasoline, liquefied petroleum gases, wood, etc.

Item 13. *Cost of Contract and Commission Work.*—If any work was done for the account of this establishment by others on materials furnished by you, report here your total expenditures for such work during 1947. Do not include any amounts that you may have already reported in item 12a as materials consumed.

PARTS IV AND V

See instructions on form.

PART VI. HIGHWAY-TYPE MOTOR VEHICLES

Manufacturers' Rated Capacity (Item 17) refers to the rated capacity of the truck or truck-tractor as stated by the truck manufacturer. If the rated capacity is not available from the specification plate or from the State registration card, please estimate. All highway type vehicles owned or operated under lease should be included whether or not they are licensed for use on public highways. Vehicles operated by trucking concerns providing transportation service to this establishment should not be included.

Do not include (in item 17c) small trailers of the type usually pulled by passenger cars and light trucks.

PARTS VII AND VIII

The instructions to these inquiries appear on the form. In some instances special instructions are necessary which are given on a supplemental sheet.

U. S. DEPARTMENT OF COMMERCE
W. AVERELL HARRIMAN, Secretary

BUREAU OF THE CENSUS
J. C. CAPT, Director
MC 2

CENSUS OF MANUFACTURES: 1947

General Instructions to Multiple Establishment Companies and Their Establishments

INTRODUCTION

A. Who Should Report?

Every company is required by law to make a separate return on a Census of Manufactures schedule for each manufacturing establishment operated for any part of the calendar year 1947 and for each general office. If the name or address shown on an enclosed report form is incorrect, make the necessary change and fill in the form.

B. What is a Manufacturing Establishment?

A manufacturing establishment, for the purpose of this report, is defined as a plant, mill, factory, shop, or works at a single location and engaged in one line of manufacture. A company or business unit often includes more than one establishment. Company units at different physical locations, even though engaged in the same line of manufacturing, processing, or assembling, should be reported as separate establishments. Where a single location comprises two or more units, divisions or departments that are engaged in different lines of manufacturing, processing, or assembling, e. g., an integrated pulp and paper mill, each such unit is an establishment for which a separate report must be prepared, if records permit (see instruction E below). This does not mean that the activities in each building should be reported separately when an establishment consists of more than one building used in the same line of manufacture at the same location.

If the enclosed forms do not cover all your manufacturing establishments or all your activities at a particular location, please write to the Bureau of the Census indicating the name, address and the type of manufacturing activity conducted at each plant for which forms were not received, and additional forms will be sent to you.

C. What is a General Office?

A general office is that part of a company or firm which handles administrative functions relating to two or more manufacturing establishments, and for which a separate set of pay-roll records are kept. A general office is not, for the purposes of this Census, a sales office or an office solely engaged in administering the non-manufacturing activities of the company. It may or may not be at the same location as one of the manufacturing establishments. A few large corporations may have more than one general office. The activities of each general office are to be reported on the general office forms (MC100B and MC100C).

D. What Kind of Activities Should the Establishment Reports Cover?

Each establishment report should cover all the production activities (manufacturing, fabricating, processing, and assembling) within the respective establishment. It should also include activities such as the generation of power for the plant, maintenance of plant and equipment, receiving, shipping, warehousing, storage, research, record keeping, health, safety, cafeteria, and other services, when operated by this manufacturing establishment for its own use. Establishment reports should exclude sales branches, research laboratories, retail stores, and general administrative offices operated as units separate from the manufacturing establishment. The activities of concessionaires operating on plant premises should also be excluded.

E. How Should Departments of a Manufacturing Operation that are Defined as Separate Establishments for Census Purposes Report?

Where two or more units, divisions or departments of a manufacturing operation at the same location and engaged in different lines of manufacturing activity, are considered separate "establishments" for Census reporting purposes, a breakdown of a total that is not directly available from the book records will sometimes be required, for example, in the case of inventories. It is understood that some figures must, in such cases, be estimates and that they are acceptable on this basis.

F. Is It Necessary to Answer Every Question?

Yes. Complete answers to all questions are required. It will be necessary to obtain missing information from you by correspondence. If a particular question (Parts I-V) does not apply to your business, indicate this by entering "none," or "0" for the question, or by explaining briefly in the "Remarks" space provided at the end of the report form. In Parts VI and

VII, however, it is not necessary to make such entries in each column and line, if the establishment does not operate a particular type of vehicle or produce a particular commodity.

G. What Period Should Each Report Cover?

Each report should cover the calendar year 1947. If your book records are not on a calendar year basis, carefully prepared estimates for this period will be accepted. If, however, this procedure will involve you in considerable additional costs, please write to the Bureau stating your fiscal year period and explaining your reporting problems in detail, and we shall let you know whether an exception can be made.

The dates given in the certification should show the exact period for which this report is made. Thus, if an establishment began to operate or ceased to operate within the year, the dates given will show that only part of a year is covered by the report. Where an establishment was operated during the early part of the year under other management, make the report for the entire year, if the records are available.

H. How Should Multiple Establishment Companies Determine Transfer Values for Individual Products and Materials?

In order to provide accurate information for individual industries, States, and local areas, it is necessary that each reporting unit of a multiple unit organization report as though it were operated as an independent manufacturing establishment. For example, where a single company operates a textile mill and also manufactures apparel, the transfer of fabrics from one establishment to the other should be reported at approximately commercial value and not at the cost of production. This requires that a company operating two or more plants assign to each plant and to the individual products a reasonable proportion of the profits and the overhead costs. The method found by each company to be most convenient will ordinarily be acceptable to the Census Bureau. It is recognized that estimates will often be involved.

If Part VII of the form calls for "interplant transfers" and "shipments to others" separately, interplant transfers means transfers between manufacturing plants. The products reported at "transfer values" by the shipping plant should be reported by the receiving plant at the same values, except for the addition of freight or other direct handling charges.

Transfers to separate selling departments, sales, branches, retail stores, export subsidiaries or other distribution channels owned by your company should be included in sales to "others" rather than in interplant transfers, and the value should be reported at approximately the net selling value f. o. b. plant.

These instructions apply to all establishments for which separate reports are being submitted including those at the same location, as well as those at different locations.

PART I. ESTABLISHMENT DESCRIPTION

Item 1. *Name of Establishment.*—Enter the name under which the establishment covered by this report does business. If it is one of several establishments doing business under the same name, also give the name or number by which it is distinguished from the other establishments of the same company. For example: Atlas Steel Co., Centerville Plant. If it is one of several establishments at the same address, as in instruction B above, it is important that you indicate type of activity; for example, Acme Textile Co., Third Street Mill, Finishing Department.

Item 2. *Establishment Location.*—This item relates to the physical location of the establishment, which may differ from the place at which mail is received. If the boundary of an incorporated municipality (city, borough, town or village) runs through the establishment, answer "Yes" to item 2e. If the establishment is not in an incorporated municipality, enter on line "b" the name of the "town" in the New England States, or township or similar subdivision of the county in other States, in which it is located. If the name of the county subdivision is not known, enter in line "b" the name or number of the street or highway upon which the establishment is located and its distance and direction from the nearest municipality; (for example, State Highway No. 26, 10 miles Northeast of York).

Item 3. *Federal Social Security Employer Identification Number.*—Report on line "a" the identification number assigned to the company by the Federal Security Agency for identifying your Quarterly Old Age and Survivors Insurance tax payments to the Bureau of Internal Revenue. Line "b" refers to the reporting unit number, if any, used in reporting to the Federal Security Agency for purposes of identifying each unit of a multi-unit organization. If two or more es-

establishments, as defined for the Census of Manufactures in instruction B of these instructions, have been assigned the same reporting unit number, give that number on each form. Do not report the establishment's State unemployment insurance account number.

Item 5. Is the Company Operating This Establishment a Subsidiary of Some Other Company?—If the reporting company is a subsidiary of another company, answer "Yes", even though the parent company may not be directly engaged in manufacturing. For the purpose of this report a subsidiary is defined as a company whose policies and activities are controlled by another company, through ownership of voting stock, trust agreements, etc.

Item 6. Does the Company or Owner Operating This Establishment Operate Any Other Manufacturing Establishments?—If the company or owner operates two or more manufacturing establishments as defined in instruction B of these instructions, your answer to this question should be "Yes". Companies which operate only one manufacturing establishment should answer "No", even though they maintain separate wholesale, retail, repair or other manufacturing establishments.

Item 7. Change of Owner or Operator During 1947.—If there has been a change in the owner or operator, please give the present address (personal or business) of an official or one or more owners of the predecessor company. See also instruction G above.

PART II. EMPLOYMENT AND PAYROLLS

Item 8. Class of Employees.—Report each employee covered by this report in one class and one only. If an employee performed work in more than one class during the pay period, report him in the class in which his principal duties fell. Note the definitions in the heading to Part II, item 8 of the form.

Items 8 and 9. Wages and Salaries.—For item 9, definition of wages and salaries is the same as that used for calculating the withholding tax.

In reporting wages and salaries for the October payroll period (item 8), the definition should be the same as used in item 9, except that you should exclude retroactive pay and nonproduction bonuses. Report in more than one column only if employees in a particular class were paid by different pay periods.

Item 10. Employees and Production Workers, by Month.—Total Employees: the inclusions and exclusions of types of workers are the same as specified by your State Unemployment Compensation Agency. Production Workers: the inclusions and exclusions of types of workers are the same as specified by the Bureau of Labor Statistics. The figures reported in the Census of Manufactures, however, may differ from those reported to other agencies if the establishment is differently defined. (See instruction B.)

Item 11. Man-Hours, by Quarter, of Production and Related Workers.—If your payroll period runs from one of the periods specified on the form into the next, distribute the man-hours between these two periods. Man-hours do not include hours paid for but not worked.

Reporting by Establishments at the Same Location.—If in the manufacturing activities carried on at one location but treated as two or more establishments for Census purposes (as in the case of integrated steel works), there are employees who work in more than one establishment or who serve all the units collectively (medical staff, yardmen, etc.), these employees, and their earnings and man-hours should be distributed among the respective establishments.

PART III. MATERIALS, FUELS, AND ELECTRIC ENERGY

General.—Report total amounts of materials, supplies, semi-finished goods, fuels, etc. actually consumed or put into production during 1947 by the establishment covered by this report. This should include only physical goods, and not services used, such as advertising, telephone, etc. Include items consumed by the establishment during the year even though purchased prior to 1947, but do not include items received during the year which were not consumed. Include materials and supplies consumed for maintenance and repair of plant and equipment as well as for production. However, do not include materials, supplies, machinery, and equipment used in the construction of your plant and equipment and chargeable to fixed assets accounts. (The cost of such items should be included in the figures reported in Part V.) Include materials, etc., owned by the establishment but consumed by others in making products for the establishment covered. Include consumption of items received from other units of your company, for which separate reports are being submitted, even if the other units are at the same location as the establishment covered.

If your records do not show actual amounts consumed or put into production during the year, the consumption may be com-

puted from your records of purchases (or receipts) and inventories of materials. Add amounts received during the year to the amounts on hand at the beginning of the year and then subtract the amounts on hand at the end of the year.

"Cost," as used in this part, refers to amounts actually paid or payable for items consumed or put into production during the year. For this reason, it should represent the cost after discounts, and should include freight charges and other direct charges incurred by the establishment acquiring these materials.

The cost reported for materials, etc., received from other plants of your company (whether at the same or different physical locations) should approximate the commercial value of these materials plus freight and other direct handling charges. Wherever possible these figures should be checked with the values reported by the plant producing and transferring the goods and should exceed the shipment values reported for the producing plant only by the addition of freight or other direct handling charges involved.

Item 12a. Materials, Parts, Containers, and Supplies (except fuels).—Report the total delivered cost of all raw materials, semi-finished goods, parts, components, containers, scrap, and supplies consumed or put into production during 1947 by the establishment covered. For semi-finished goods, parts, or components produced and incorporated into finished manufactures at the same plant, report the cost of the raw materials used in their manufacture rather than the value of the intermediate products made.

If a central materials depot is maintained by the company, on which the various plants may draw, no separate report should be prepared for this depot. Instead, only the materials actually consumed by a particular plant should be charged to that plant.

Item 12b. Fuels for All Purposes.—Do not include fuels both made and consumed in this establishment. Fuels consumed in this establishment but made in another unit of your company (whether at the same or different physical location) for which a separate report is being submitted, should be reported as fuel in item 12b, and a commercial value assigned. For example, blast furnace gases consumed within the blast furnace should not be reported as fuel consumed by the blast furnace, but blast furnace gases consumed by the steel works and rolling mill should be reported in item 6 of 12b on the report for the steel plant, and identified as such.

Fuels consumed by a central power plant in the generation of electric energy should be distributed among the manufacturing establishments in accordance with their consumption of electric energy (see instructions for item 14).

Item 12b (6). Other Fuels.—Include gasoline, liquefied petroleum gases, wood, etc.

Item 13. Cost of Contract and Commission Work.—If any work was done by others on materials furnished by the establishment covered, report here the total 1947 expenditures for such work. Do not include any amounts that you may have already reported in item 12a as materials consumed.

Item 14. Electric Energy Generated and Sold.—If a central power plant serves two or more establishments for which separate reports are required, the electric energy generated should be distributed among the establishments in proportion to their consumption of electric energy. Electric energy sold to other companies may be reported by the establishment which reports the largest amount generated.

PART VI. HIGHWAY-TYPE MOTOR VEHICLES

Manufacturers' Rated Capacity (Item 17) refers to the rated capacity of the truck or truck-tractor as stated by the truck manufacturer. If the rated capacity is not available from the specification plate or from the State registration card, please estimate. All highway-type vehicles owned or operated under lease should be included whether or not they are licensed for use on public highways. Vehicles operated by trucking concerns providing transportation service to this establishment should not be included.

Vehicles owned or held under lease by the company for use of its individual plants should be included in the report of the plant to which assigned on December 31, 1947.

Do not include (in item 17c) small trailers of the type usually pulled by passenger cars and light trucks.

PARTS VII AND VIII

The instructions for these parts appear on the forms; where special instructions are necessary they are given on a supplemental sheet.

Part VIII of the forms for a number of industries requires reporting on quantity and value of specific materials consumed in the production of the commodities shipped during the year by the establishment covered. The establishment figures for such materials should also include those received from other units or plants of the same company for which separate Census reports are submitted.

THIS INQUIRY IS AUTHORIZED BY ACT OF CONGRESS (46 STAT. 21: 13 USC 201) WHICH REQUIRES THAT YOU FILE A REPORT. The law requires that your report be accorded confidential treatment. Your census report cannot be used for purposes of taxation investigation, or regulation.	FORM MC-100A DEPARTMENT OF COMMERCE BUREAU OF THE CENSUS	CONFIDENTIAL	FORM APPROVED BUDGET BUREAU NO. 41-46322																			
CENSUS OF MANUFACTURES: 1947 General Form.		MC-100A																				
TO: Bureau of the Census, Industry Division, Washington 25, D. C.		FOR CENSUS USE ONLY <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;">Ind.</td> <td style="width: 10%;">State</td> <td style="width: 10%;">County</td> <td style="width: 10%;">City</td> <td style="width: 10%;">Area</td> <td style="width: 10%;">T.E.</td> <td style="width: 10%;">P.W.</td> <td style="width: 10%;">V.A.</td> <td style="width: 10%;">C.O.</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>			Ind.	State	County	City	Area	T.E.	P.W.	V.A.	C.O.									
Ind.	State	County	City	Area	T.E.	P.W.	V.A.	C.O.														
Complete answers to all questions must be supplied for each manufacturing establishment. You are requested to complete and return this form within 30 days after its receipt. RETAIN THE GREEN COPY FOR YOUR FILES. If this establishment was not in business or did not operate at any time during the calendar year 1947, explain briefly under "Remarks," fill in certification, and return the form immediately.		(Correct any errors in above name and address)																				
ITEM 1	NAME OF ESTABLISHMENT	TYPE OF OWNERSHIP (Check one) <input type="checkbox"/> INDIVIDUAL PROPRIETOR <input type="checkbox"/> CORPORATION <input type="checkbox"/> PARTNERSHIP <input type="checkbox"/> OTHER (Specify) _____ If individual proprietor or partnership, give name of owner or each partner _____ <div style="border: 1px solid black; width: 100px; float: right; text-align: center;">DO NOT USE A-1</div>																				
ITEM 2	LOCATION OF ESTABLISHMENT a. STREET AND NUMBER _____ b. CITY, TOWN, VILLAGE, ETC. _____ c. COUNTY _____ d. STATE _____ e. IS THIS ESTABLISHMENT LOCATED WITHIN PRESENT CORPORATE BOUNDARIES OF CITY, TOWN OR VILLAGE NAMED? (Check one) <input type="checkbox"/> YES <input type="checkbox"/> NO	ITEM 5 INDICATE BY CHECKING PROPER BOX WHETHER ANY CHANGE OF OWNER OR OPERATOR OF THIS ESTABLISHMENT OCCURRED DURING 1947: <input type="checkbox"/> NO CHANGE <input type="checkbox"/> PURCHASED <input type="checkbox"/> SOLD <input type="checkbox"/> LEASED If a change occurred during 1947, give name and address of other owner or operator and the date of change: _____ <div style="border: 1px solid black; width: 100px; float: right; text-align: center;">DO NOT USE A-1</div>																				
ITEM 3	a. FEDERAL SOCIAL SECURITY EMPLOYER IDENTIFICATION NO. (As reported on employer's tax return under Federal Insurance Contribution Act, Form SS-1a) _____	Date of Change <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;">A-2</td> <td style="width: 10%;">A-3</td> <td style="width: 10%;">A-4</td> <td style="width: 10%;">A-5</td> <td style="width: 10%;">B-1</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>			A-2	A-3	A-4	A-5	B-1													
A-2	A-3	A-4	A-5	B-1																		
ITEM 6	WAGES AND SALARIES PAID FOR THE ENTIRE YEAR 1947.....\$ _____ (Omit Cents) Feb. May Aug. Nov.																					
ITEM 7	TOTAL NUMBER OF PERSONS EMPLOYED DURING THE PAY PERIOD ENDED NEAREST THE 15TH OF THE FOLLOWING MONTHS..... Feb. May Aug. Nov.																					
ITEM 8	COST OF MATERIALS, COMPONENTS, SUPPLIES, CONTAINERS, FUEL, AND ELECTRIC ENERGY CONSUMED \$ _____ (Omit Cents) B-1 XXXXXXXXXXXX																					

ITEM	PRODUCTS SHIPPED DURING 1947: THIS INQUIRY SHOULD ACCOUNT FOR ALL PRODUCTS SHIPPED DURING 1947 FROM THE ESTABLISHMENT COVERED BY THIS REPORT. REPORT SEPARATELY EACH OF THE PRINCIPAL PRODUCTS WHICH YOU MAKE.						DO NOT USE
	PRODUCT (Describe in your own words. For example: Cheese, lamp shades, umbrellas, women's trimmed hats, etc.) (A)	Unit of Measure (B)	Quantity (C)	Value f.o.b. Plant (Omit Cente) (D)	DO NOT USE		
9	PRODUCTS MADE. (Specify three principal products and group others on line (4): (1) (2) (3) (4) ALL OTHER PRODUCTS (5) RECEIPTS FROM OTHER MANUFACTURING ACTIVITIES (Scrap, repair work, etc.) (6) TOTAL (Sum of 1 through 5)						
10	DESCRIBE BRIEFLY THE PRINCIPAL PROCESSES USED IN MAKING THE PRODUCTS REPORTED IN ITEM 9. (For example: Dressing and dyeing pelts, galvanizing metal products, engraving on metal, sewing, weaving, etc.):	NAME THE PRINCIPAL MATERIALS USED IN THE MANUFACTURE OF THE PRODUCTS REPORTED IN ITEM 9:	ITEM 11	ITEM 12	WERE THE PRODUCTS MADE BY THIS ESTABLISHMENT SOLD CHIEFLY THROUGH A SINGLE RETAIL OUTLET LOCATED ON THE MANUFACTURING PREMISES? (Check one) <input type="checkbox"/> YES <input type="checkbox"/> NO		
13	REMARKS						
14	CERTIFICATION: The undersigned certifies that the information contained in this report is substantially correct and complete to the best of his knowledge and belief, and covers the operations of this establishment from _____ to _____ By _____ (Name of Company) _____ (Signature of Authorized Official) _____ (Date) _____ (Title)						

PUNCH CARDS

CARD
A

Card Type	Industry	State	County	City	Area	T.E. Size Code	P.W. Size Code	V.A. Size Code	Char. Den.	Plant Identification Number	Wages and Salaries		Employee Months		Production Workers Man-hours (Year)	Value of Shipments (1000)	Added Value (1000)	Cost of Materials etc.	Monthly Average Number of Employees		
											Production and Related Workers (1000)	Total (1000)	Production Workers Months	Total Months					Production and Related Workers	Total	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22

CARD
B

Card Type	Industry	State	County	City	Area	T.E. Size Code	P.W. Size Code	V.A. Size Code	Char. Den.	Plant Identification Number	Total Cost of Materials etc. (1000)	Inventories				Expenditures for New Plant and Equipment						Excess																																																									
												Beginning		Ending		Construction		Machinery		Total of Construction and Machinery (1000)	Total (1000)																																																										
												Products (1000)	Materials (1000)	Products (1000)	Materials (1000)	Buildings (1000)	Other (1000)	Production (1000)	Other (1000)																																																												
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80

CARD
C

Card Type	Industry	State	County	City	Area	T.E. Size Code	P.W. Size Code	V.A. Size Code	Char. Den.	Plant Identification Number	Employment - Pay Period Nearest October 15, 1947								Wages And Salaries For Pay Period				Excess																																																								
											Males				Females				Total	Production	Force Account	Clerical																																																									
											Production	Force Account	Clerical	Other	Production	Force Account	Clerical	Other																																																													
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80

CARD
D

Card Type	Industry	State	County	City	Area	T.E. Size Code	P.W. Size Code	V.A. Size Code	Char. Den.	Plant Identification Number	Total Wages and Salaries - 1947				Man Hours of Production and Related Workers						Excess																																																										
											Production (1000)	Force Account (1000)	Adminis - trative (1000)	Total (1000)	January - March (1000)	April - June (1000)	July - September (1000)	October - December (1000)	Total 1947 (1000)																																																												
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80

CARD
E

Card Type	Industry	State	County	City	Area	T.E. Size Code	P.W. Size Code	V.A. Size Code	Char. Den.	Plant Identification Number	Total Number of Employees												Excess																																																								
											January	February	March	April	May	June	July	August	September	October	November	December																																																									
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80

CARD
F

Card Type	Industry	State	County	City	Area	T.E. Size Code	P.W. Size Code	V.A. Size Code	Char. Den.	Plant Identification Number	Number of Production Workers												Excess																																																								
											January	February	March	April	May	June	July	August	September	October	November	December																																																									
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80

CARD
G

2nd Year	Industry	State	County	City	Area	T E Size Code	P W Size Code	V A Size Code	Clear 0-1	Plant Identification Number	Cost of Materials, Parts Containers and Supplies	Fuel								Totals																																																											
												Bituminous Coal		Anthracite Coal		Coke		Fuel Oil																																																													
												Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost																																																												
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80

CARD
H

[illegible]

CARD

J

[illegible]

CARD
K

CARD TYPE	INDUSTRY				STATE	COUNTY	CITY	STREET	W.A. SIZE CODE	ESTABLISHMENT NUMBER	PLANT IDENTIFICATION NUMBER	SCHEDULE NUMBER	PRODUCT CLASS	PRODUCT	FIELD 1	FIELD 2	FIELD 3	FIELD 4	FIELD 5	FIELD 6	FIELD 7	FIELD 8	FIELD 9	FIELD 10	FIELD 11	FIELD 12	FIELD 13	FIELD 14	FIELD 15	FIELD 16	FIELD 17	FIELD 18	FIELD 19	FIELD 20	FIELD 21	FIELD 22	FIELD 23	FIELD 24	FIELD 25	FIELD 26	FIELD 27	FIELD 28	FIELD 29	FIELD 30	FIELD 31	FIELD 32	FIELD 33	FIELD 34	FIELD 35	FIELD 36	FIELD 37	FIELD 38	FIELD 39	FIELD 40	FIELD 41	FIELD 42	FIELD 43	FIELD 44	FIELD 45	FIELD 46	FIELD 47	FIELD 48	FIELD 49	FIELD 50	FIELD 51	FIELD 52	FIELD 53	FIELD 54	FIELD 55	FIELD 56	FIELD 57	FIELD 58	FIELD 59	FIELD 60	FIELD 61	FIELD 62	FIELD 63	FIELD 64	FIELD 65	FIELD 66	FIELD 67	FIELD 68	FIELD 69	FIELD 70	FIELD 71	FIELD 72	FIELD 73	FIELD 74	FIELD 75	FIELD 76	FIELD 77	FIELD 78	FIELD 79	FIELD 80	FIELD 81	FIELD 82	FIELD 83	FIELD 84	FIELD 85	FIELD 86	FIELD 87	FIELD 88	FIELD 89	FIELD 90	FIELD 91	FIELD 92	FIELD 93	FIELD 94	FIELD 95	FIELD 96	FIELD 97	FIELD 98	FIELD 99	FIELD 100	FIELD 101	FIELD 102	FIELD 103	FIELD 104	FIELD 105	FIELD 106	FIELD 107	FIELD 108	FIELD 109	FIELD 110	FIELD 111	FIELD 112	FIELD 113	FIELD 114	FIELD 115	FIELD 116	FIELD 117	FIELD 118	FIELD 119	FIELD 120	FIELD 121	FIELD 122	FIELD 123	FIELD 124	FIELD 125	FIELD 126	FIELD 127	FIELD 128	FIELD 129	FIELD 130	FIELD 131	FIELD 132	FIELD 133	FIELD 134	FIELD 135	FIELD 136	FIELD 137	FIELD 138	FIELD 139	FIELD 140	FIELD 141	FIELD 142	FIELD 143	FIELD 144	FIELD 145	FIELD 146	FIELD 147	FIELD 148	FIELD 149	FIELD 150	FIELD 151	FIELD 152	FIELD 153	FIELD 154	FIELD 155	FIELD 156	FIELD 157	FIELD 158	FIELD 159	FIELD 160	FIELD 161	FIELD 162	FIELD 163	FIELD 164	FIELD 165	FIELD 166	FIELD 167	FIELD 168	FIELD 169	FIELD 170	FIELD 171	FIELD 172	FIELD 173	FIELD 174	FIELD 175	FIELD 176	FIELD 177	FIELD 178	FIELD 179	FIELD 180	FIELD 181	FIELD 182	FIELD 183	FIELD 184	FIELD 185	FIELD 186	FIELD 187	FIELD 188	FIELD 189	FIELD 190	FIELD 191	FIELD 192	FIELD 193	FIELD 194	FIELD 195	FIELD 196	FIELD 197	FIELD 198	FIELD 199	FIELD 200	FIELD 201	FIELD 202	FIELD 203	FIELD 204	FIELD 205	FIELD 206	FIELD 207	FIELD 208	FIELD 209	FIELD 210	FIELD 211	FIELD 212	FIELD 213	FIELD 214	FIELD 215	FIELD 216	FIELD 217	FIELD 218	FIELD 219	FIELD 220	FIELD 221	FIELD 222	FIELD 223	FIELD 224	FIELD 225	FIELD 226	FIELD 227	FIELD 228	FIELD 229	FIELD 230	FIELD 231	FIELD 232	FIELD 233	FIELD 234	FIELD 235	FIELD 236	FIELD 237	FIELD 238	FIELD 239	FIELD 240	FIELD 241	FIELD 242	FIELD 243	FIELD 244	FIELD 245	FIELD 246	FIELD 247	FIELD 248	FIELD 249	FIELD 250	FIELD 251	FIELD 252	FIELD 253	FIELD 254	FIELD 255	FIELD 256	FIELD 257	FIELD 258	FIELD 259	FIELD 260	FIELD 261	FIELD 262	FIELD 263	FIELD 264	FIELD 265	FIELD 266	FIELD 267	FIELD 268	FIELD 269	FIELD 270	FIELD 271	FIELD 272	FIELD 273	FIELD 274	FIELD 275	FIELD 276	FIELD 277	FIELD 278	FIELD 279	FIELD 280	FIELD 281	FIELD 282	FIELD 283	FIELD 284	FIELD 285	FIELD 286	FIELD 287	FIELD 288	FIELD 289	FIELD 290	FIELD 291	FIELD 292	FIELD 293	FIELD 294	FIELD 295	FIELD 296	FIELD 297	FIELD 298	FIELD 299	FIELD 300	FIELD 301	FIELD 302	FIELD 303	FIELD 304	FIELD 305	FIELD 306	FIELD 307	FIELD 308	FIELD 309	FIELD 310	FIELD 311	FIELD 312	FIELD 313	FIELD 314	FIELD 315	FIELD 316	FIELD 317	FIELD 318	FIELD 319	FIELD 320	FIELD 321	FIELD 322	FIELD 323	FIELD 324	FIELD 325	FIELD 326	FIELD 327	FIELD 328	FIELD 329	FIELD 330	FIELD 331	FIELD 332	FIELD 333	FIELD 334	FIELD 335	FIELD 336	FIELD 337	FIELD 338	FIELD 339	FIELD 340	FIELD 341	FIELD 342	FIELD 343	FIELD 344	FIELD 345	FIELD 346	FIELD 347	FIELD 348	FIELD 349	FIELD 350	FIELD 351	FIELD 352	FIELD 353	FIELD 354	FIELD 355	FIELD 356	FIELD 357	FIELD 358	FIELD 359	FIELD 360	FIELD 361	FIELD 362	FIELD 363	FIELD 364	FIELD 365	FIELD 366	FIELD 367	FIELD 368	FIELD 369	FIELD 370	FIELD 371	FIELD 372	FIELD 373	FIELD 374	FIELD 375	FIELD 376	FIELD 377	FIELD 378	FIELD 379	FIELD 380	FIELD 381	FIELD 382	FIELD 383	FIELD 384	FIELD 385	FIELD 386	FIELD 387	FIELD 388	FIELD 389	FIELD 390	FIELD 391	FIELD 392	FIELD 393	FIELD 394	FIELD 395	FIELD 396	FIELD 397	FIELD 398	FIELD 399	FIELD 400	FIELD 401	FIELD 402	FIELD 403	FIELD 404	FIELD 405	FIELD 406	FIELD 407	FIELD 408	FIELD 409	FIELD 410	FIELD 411	FIELD 412	FIELD 413	FIELD 414	FIELD 415	FIELD 416	FIELD 417	FIELD 418	FIELD 419	FIELD 420	FIELD 421	FIELD 422	FIELD 423	FIELD 424	FIELD 425	FIELD 426	FIELD 427	FIELD 428	FIELD 429	FIELD 430	FIELD 431	FIELD 432	FIELD 433	FIELD 434	FIELD 435	FIELD 436	FIELD 437	FIELD 438	FIELD 439	FIELD 440	FIELD 441	FIELD 442	FIELD 443	FIELD 444	FIELD 445	FIELD 446	FIELD 447	FIELD 448	FIELD 449	FIELD 450	FIELD 451	FIELD 452	FIELD 453	FIELD 454	FIELD 455	FIELD 456	FIELD 457	FIELD 458	FIELD 459	FIELD 460	FIELD 461	FIELD 462	FIELD 463	FIELD 464	FIELD 465	FIELD 466	FIELD 467	FIELD 468	FIELD 469	FIELD 470	FIELD 471	FIELD 472	FIELD 473	FIELD 474	FIELD 475	FIELD 476	FIELD 477	FIELD 478	FIELD 479	FIELD 480	FIELD 481	FIELD 482	FIELD 483	FIELD 484	FIELD 485	FIELD 486	FIELD 487	FIELD 488	FIELD 489	FIELD 490	FIELD 491	FIELD 492	FIELD 493	FIELD 494	FIELD 495	FIELD 496	FIELD 497	FIELD 498	FIELD 499	FIELD 500	FIELD 501	FIELD 502	FIELD 503	FIELD 504	FIELD 505	FIELD 506	FIELD 507	FIELD 508	FIELD 509	FIELD 510	FIELD 511	FIELD 512	FIELD 513	FIELD 514	FIELD 515	FIELD 516	FIELD 517	FIELD 518	FIELD 519	FIELD 520	FIELD 521	FIELD 522	FIELD 523	FIELD 524	FIELD 525	FIELD 526	FIELD 527	FIELD 528	FIELD 529	FIELD 530	FIELD 531	FIELD 532	FIELD 533	FIELD 534	FIELD 535	FIELD 536	FIELD 537	FIELD 538	FIELD 539	FIELD 540	FIELD 541	FIELD 542	FIELD 543	FIELD 544	FIELD 545	FIELD 546	FIELD 547	FIELD 548	FIELD 549	FIELD 550	FIELD 551	FIELD 552	FIELD 553	FIELD 554	FIELD 555	FIELD 556	FIELD 557	FIELD 558	FIELD 559	FIELD 560	FIELD 561	FIELD 562	FIELD 563	FIELD 564	FIELD 565	FIELD 566	FIELD 567	FIELD 568	FIELD 569	FIELD 570	FIELD 571	FIELD 572	FIELD 573	FIELD 574	FIELD 575	FIELD 576	FIELD 577	FIELD 578	FIELD 579	FIELD 580	FIELD 581	FIELD 582	FIELD 583	FIELD 584	FIELD 585	FIELD 586	FIELD 587	FIELD 588	FIELD 589	FIELD 590	FIELD 591	FIELD 592	FIELD 593	FIELD 594	FIELD 595	FIELD 596	FIELD 597	FIELD 598	FIELD 599	FIELD 600	FIELD 601	FIELD 602	FIELD 603	FIELD 604	FIELD 605	FIELD 606	FIELD 607	FIELD 608	FIELD 609	FIELD 610	FIELD 611	FIELD 612	FIELD 613	FIELD 614	FIELD 615	FIELD 616	FIELD 617	FIELD 618	FIELD 619	FIELD 620	FIELD 621	FIELD 622	FIELD 623	FIELD 624	FIELD 625	FIELD 626	FIELD 627	FIELD 628	FIELD 629	FIELD 630	FIELD 631	FIELD 632	FIELD 633	FIELD 634	FIELD 635	FIELD 636	FIELD 637	FIELD 638	FIELD 639	FIELD 640	FIELD 641	FIELD 642	FIELD 643	FIELD 644	FIELD 645	FIELD 646	FIELD 647	FIELD 648	FIELD 649	FIELD 650	FIELD 651	FIELD 652	FIELD 653	FIELD 654	FIELD 655	FIELD 656	FIELD 657	FIELD 658	FIELD 659	FIELD 660	FIELD 661	FIELD 662	FIELD 663	FIELD 664	FIELD 665	FIELD 666	FIELD 667	FIELD 668	FIELD 669	FIELD 670	FIELD 671	FIELD 672	FIELD 673	FIELD 674	FIELD 675	FIELD 676	FIELD 677	FIELD 678	FIELD 679	FIELD 680	FIELD 681	FIELD 682	FIELD 683	FIELD 684	FIELD 685	FIELD 686	FIELD 687	FIELD 688	FIELD 689	FIELD 690	FIELD 691	FIELD 692	FIELD 693	FIELD 694	FIELD 695	FIELD 696	FIELD 697	FIELD 698	FIELD 699	FIELD 700	FIELD 701	FIELD 702	FIELD 703	FIELD 704	FIELD 705	FIELD 706	FIELD 707	FIELD 708	FIELD 709	FIELD 710	FIELD 711	FIELD 712	FIELD 713	FIELD 714	FIELD 715	FIELD 716	FIELD 717	FIELD 718	FIELD 719	FIELD 720	FIELD 721	FIELD 722	FIELD 723	FIELD 724	FIELD 725	FIELD 726	FIELD 727	FIELD 728	FIELD 729	FIELD 730	FIELD 731	FIELD 732	FIELD 733	FIELD 734	FIELD 735	FIELD 736	FIELD 737	FIELD 738	FIELD 739	FIELD 740	FIELD 741	FIELD 742	FIELD 743	FIELD 744	FIELD 745	FIELD 746	FIELD 747	FIELD 748	FIELD 749	FIELD 750	FIELD 751	FIELD 752	FIELD 753	FIELD 754	FIELD 755	FIELD 756	FIELD 757	FIELD 758	FIELD 759	FIELD 760	FIELD 761	FIELD 762	FIELD 763	FIELD 764	FIELD 765	FIELD 766	FIELD 767	FIELD 768	FIELD 769	FIELD 770	FIELD 771	FIELD 772	FIELD 773	FIELD 774	FIELD 775	FIELD 776	FIELD 777	FIELD 778	FIELD 779	FIELD 780	FIELD 781	FIELD 782	FIELD 783	FIELD 784	FIELD 785	FIELD 786	FIELD 787	FIELD 788	FIELD 789	FIELD 790	FIELD 791	FIELD 792	FIELD 793	FIELD 794	FIELD 795	FIELD 796	FIELD 797	FIELD 798	FIELD 799	FIELD 800	FIELD 801	FIELD 802	FIELD 803	FIELD 804	FIELD 805	FIELD 806	FIELD 807	FIELD 808	FIELD 809	FIELD 810	FIELD 811	FIELD 812	FIELD 813	FIELD 814	FIELD 815	FIELD 816	FIELD 817	FIELD 818	FIELD 819	FIELD 820	FIELD 821	FIELD 822	FIELD 823	FIELD 824	FIELD 825	FIELD 826	FIELD 827	FIELD 828	FIELD 829	FIELD 830	FIELD 831	FIELD 832	FIELD 833	FIELD 834	FIELD 835	FIELD 836	FIELD 837	FIELD 838	FIELD 839	FIELD 840	FIELD 841	FIELD 842	FIELD 843	FIELD 844	FIELD 845	FIELD 846	FIELD 847	FIELD 848	FIELD 849	FIELD 850	FIELD 851	FIELD 852	FIELD 853	FIELD 854	FIELD 855	FIELD 856	FIELD 857	FIELD 858	FIELD 859	FIELD 860	FIELD 861	FIELD 862	FIELD 863	FIELD 864	FIELD 865	FIELD 866	FIELD 867	FIELD 868	FIELD 869	FIELD 870	FIELD 871	FIELD 872	FIELD 873	FIELD 874	FIELD 875	FIELD 876	FIELD 877	FIELD 878	FIELD 879	FIELD 880	FIELD 881	FIELD 882	FIELD 883	FIELD 884	FIELD 885	FIELD 886	FIELD 887	FIELD 888	FIELD 889	FIELD 890	FIELD 891	FIELD 892	FIELD 893	FIELD 894	FIELD 895	FIELD 896	FIELD 897	FIELD 898	FIELD 899	FIELD 900	FIELD 901	FIELD 902	FIELD 903	FIELD 904	FIELD 905	FIELD 906	FIELD 907	FIELD 908	FIELD 909	FIELD 910	FIELD 911	FIELD 912	FIELD 913	FIELD 914	FIELD 915	FIELD 916	FIELD 917	FIELD 918	FIELD 919	FIELD 920	FIELD 921	FIELD 922	FIELD 923	FIELD 924	FIELD 925	FIELD 926	FIELD 927	FIELD 928	FIELD 929	FIELD 930	FIELD 931	FIELD 932	FIELD 933	FIELD 934	FIELD 935	FIELD 936	FIELD 937	FIELD 938	FIELD 939	FIELD 940	FIELD 941	FIELD 942	FIELD 943	FIELD 944	FIELD 945	FIELD 946	FIELD 947	FIELD 948	FIELD 949	FIELD 950	FIELD 951	FIELD 952	FIELD 953	FIELD 954	FIELD 955	FIELD 956	FIELD 957	FIELD 958	FIELD 959	FIELD 960	FIELD 961	FIELD 962	FIELD 963	FIELD 964	FIELD 965	FIELD 966	FIELD 967	FIELD 968	FIELD 969	FIELD 970	FIELD 971	FIELD 972	FIELD 973	FIELD 974	FIELD 975	FIELD 976	FIELD 977	FIELD 978	FIELD 979	FIELD 980	FIELD 981	FIELD 982	FIELD 983	FIELD 984	FIELD 985	FIELD 986	FIELD 987	FIELD 988	FIELD 989	FIELD 990	FIELD 991	FIELD 992	FIELD 993	FIELD 994	FIELD 995	FIELD 996	FIELD 997	FIELD 998	FIELD 999	FIELD 1000	FIELD 1001	FIELD 1002	FIELD 1003	FIELD 1004	FIELD 1005	FIELD 1006	FIELD 1007	FIELD 1008	FIELD 1009	FIELD 1010	FIELD 1011	FIELD 1012	FIELD 1013	FIELD 1014	FIELD 1015	FIELD 1016	FIELD 1017	FIELD 1018	FIELD 1019	FIELD 1020	FIELD 1021	FIELD 1022	FIELD 1023	FIELD 1024	FIELD 1025	FIELD 1026	FIELD 1027	FIELD 1028	FIELD 1029	FIELD 1030	FIELD 1031	FIELD 1032	FIELD 1033	FIELD 1034	FIELD 1035	FIELD 1036	FIELD 1037	FIELD 1038	FIELD 1039	FIELD 1040	FIELD 1041	FIELD 1042	FIELD 1043	FIELD 1044	FIELD 1045	FIELD 1046	FIELD 1047	FIELD 1048	FIELD 1049	FIELD 1050	FIELD 1051	FIELD 1052	FIELD 1053	FIELD 1054	FIELD 1055	FIELD 1056	FIELD 1057	FIELD 1058	FIELD 1059	FIELD 1060	FIELD 1061	FIELD 1062	FIELD 1063	FIELD 1064	FIELD 1065	FIELD 1066	FIELD 1067	FIELD 1068	FIELD 1069	FIELD 1070	FIELD 1071	FIELD 1072	FIELD 1073	FIELD 1074	FIELD 1075	FIELD 1076	FIELD 1077	FIELD 1078	FIELD 1079	FIELD 1080	FIELD 1081	FIELD 1082	FIELD 1083	FIELD 1084	FIELD 1085	FIELD 1086	FIELD 1087	FIELD 1088	FIELD 1089	FIELD 1090	FIELD 1091	FIELD 1092	FIELD 1093	FIELD 1094	FIELD 1095	FIELD 1096	FIELD 1097	FIELD 1098	FIELD 1099	FIELD 1100	FIELD 1101	FIELD 1102	FIELD 1103	FIELD 1104	FIELD 1105	FIELD 1106	FIELD 1107	FIELD 1108	FIELD 1109	FIELD 1110	FIELD 1111	FIELD 1112	FIELD 1113	FIELD 1114	FIELD 1115	FIELD 1116	FIELD 1117	FIELD 1118	FIELD 1119	FIELD 1120	FIELD 1121	FIELD 1122	FIELD 1123	FIELD 1124	FIELD 1125	FIELD 1126	FIELD 1127	FIELD 1128	FIELD 1129	FIELD 1130	FIELD 1131	FIELD 1132	FIELD 1133	FIELD 1134	FIELD 1135	FIELD 1136	FIELD 1137	FIELD 1138	FIELD 1139	FIELD 1140	FIELD 1141	FIELD 1142	FIELD 1143	FIELD 1144	FIELD 1145	FIELD 1146	FIELD 1147	FIELD 1148	FIELD 1149	FIELD 1150	FIELD 1151	FIELD 1152	FIELD 1153	FIELD 1154	FIELD 1155	FIELD 1156	FIELD 1157	FIELD 1158	FIELD 1159	FIELD 1160	FIELD 1161	FIELD 1162	FIELD 1163	FIELD 1164	FIELD 1165	FIELD 1166	FIELD 1167	FIELD 1168	FIELD 1169	FIELD 1170	FIELD 1171	FIELD 1172	FIELD 1173	FIELD 1174	FIELD 1175	FIELD 1176	FIELD 1177	FIELD 1178	FIELD 1179	FIELD 1180	FIELD 1181	FIELD 1182	FIELD 1183	FIELD 1184	FIELD 1185	FIELD 1186	FIELD 1187	FIELD 1188	FIELD 1189	FIELD 1190	FIELD 1191	FIELD 1192	FIELD 1193	FIELD 1194	FIELD 1195	FIELD 1196	FIELD 1197	FIELD 1198	FIELD 1199	FIELD 1200	FIELD 1201	FIELD 1202	FIELD 1203	FIELD 1204	FIELD 1205	FIELD 1206	FIELD 1207	FIELD 1208	FIELD 1209	FIELD 1210	FIELD 1211	FIELD 1212	FIELD 1213	FIELD 1214	FIELD 1215	FIELD 1216	FIELD 1217	FIELD 1
-----------	----------	--	--	--	-------	--------	------	--------	----------------	----------------------	-----------------------------	-----------------	---------------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	---------

CARD
L

EMP TYPE	INDUSTRY	STATE	COUNTY	CITY	AREA	PLANT IDENTIFICATION NUMBER	SCHEDULE NUMBER	QUANTITY CDM	MATERIAL CODE	FIELD 1	FIELD 2	FIELD 3	FIELD 4	TECHS	LEADS
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

CARD
M

[illegible]

APPENDIX C—INDUSTRY DESCRIPTIONS

This appendix contains descriptions of each of the industries used in the 1947 Census of Manufactures. The first column shows the 1947 census industry group (3-digit) and industry (4-digit) codes. Where the census industry differs in content from the Standard Industrial Classification industry with the same code, the equivalent Standard Industrial Classification codes are shown in parentheses following the census short title. The "Title and description" column shows the census short title followed, where applicable, by parentheses showing the Standard Industrial Classification full title and nature of the difference, if any, between the census and Standard Industrial Classification industries bearing the same code. The industry descriptions are based largely upon the Standard In-

dustrial Classification. The last two columns show the value of primary products shipped by the specified industry (products included, by definition, in the specified industry) as a percentage of (a) total value of primary and secondary products shipped by the specified industry, not including miscellaneous receipts for contract work on materials owned by others, scrap and salable refuse, and nonmanufacturing activity (merchandising, construction, repair, etc.), and (b) total value of these primary products of the specified industry shipped by all industries. The following abbreviations are used: SIC—Standard Industrial Classification; n.e.c.—not elsewhere classified; n.a.—not available.

MAJOR GROUP 20—FOOD AND KINDRED PRODUCTS

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
	The Major Group as a Whole			
	This major group includes establishments manufacturing foods and beverages for human consumption, and certain related products, such as manufactured ice, chewing gum, and prepared feeds for animals and fowls. Establishments which manufacture dairy products and are also engaged in the distribution of fluid milk or cream are classified in trade industries. Establishments producing meat, poultry, dairy, bakery, and confectionery products for sale chiefly at retail on the manufacturing premises are also classified in trade industries.			
201	MEAT PRODUCTS			
2011	Meat packing, wholesale (Includes SIC Industry 2011, Meat packing, wholesale; and 2012, Custom slaughtering, wholesale)----- Establishments primarily engaged in the slaughtering of cattle, hogs, sheep, lambs, calves, and other animals, for meat to be sold fresh or to be used on the same premises in canning and curing, and in making sausage, lard, and other products. Important products of this industry include fresh meat (beef, veal, mutton, lamb, and pork); cured beef and pork; canned beef, pork, and other meat goods; sausage, and lard. Establishments manufacturing sausages and meat specialties from purchased meats are classified in Industry 2013; and establishments killing, dressing, and packing poultry, rabbits, and other small game in Industry 2015.	208.4	96	99
2013	Prepared meats (Includes SIC Industry 2013, Sausages and other prepared meat products; and natural sausage casings from 2014, Sausage casings)----- Establishments primarily engaged in manufacturing sausages, prepared meats, meat specialties, and animal casings, but performing no slaughtering operations on the premises. Sausage or meat kitchens operated by packing houses as separate establishments also are included in this industry.	44.4		
2015	Poultry dressing, wholesale (Part of SIC Industry 2015, Poultry and small game dressing and packing, wholesale [excludes canned poultry and chicken soup])----- Establishments primarily engaged in killing, dressing, and packing poultry, rabbits, and other small game for the trade. Important products of the industry include dressed and packed poultry (chickens, turkeys, ducks, and geese), dressed rabbits, and dressed hares. Establishments primarily engaged in canning chicken soup and poultry (whole and parts) are classified in Industry 2033.	21.7	88	88

See footnotes at end of table.

MAJOR GROUP 20—FOOD AND KINDRED PRODUCTS—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
202	DAIRY PRODUCTS			
2021	Creamery butter Establishments primarily engaged in manufacturing creamery butter, but which are not engaged in the house-to-house distribution of fluid milk or cream. This industry does not include the production of butter on farms, classified in Agriculture; milk and cream assembly stations, classified in trade industries; or establishments primarily engaged in manufacturing processed and ladle butter, classified in Industry 2025.	20.6	80	71
2022	Natural cheese Establishments primarily engaged in manufacturing all types of natural cheese, including cottage cheese, but which are not engaged in the house-to-house distribution of fluid milk or cream. Establishments primarily engaged in manufacturing processed cheese are classified in Industry 2025.	12.3	83	81
2023	Concentrated milk (<i>Condensed and evaporated milk</i>) Establishments primarily engaged in manufacturing condensed and evaporated milk, and related products such as sweetened condensed milk (case and bulk goods); unsweetened condensed and evaporated milk; condensed and evaporated buttermilk; dried and powdered skim milk, whole milk, whey, and buttermilk; and ice-cream mix and ice-milk mix made for sale as such.	16.6	84	73
2024	Ice cream and ices Establishments primarily engaged in manufacturing ice cream, ices, and other frozen desserts, but which are not engaged in the distribution of fluid milk or cream.	35.8	91	69
2025	Special dairy products Establishments primarily engaged in manufacturing special dairy products, but which are not engaged in the distribution of fluid milk or cream. Important products of this industry include processed and ladle butter, malted milk, and fermented milk; and processed cheese, cheese pastes, and spreads made from natural cheese. Establishments primarily engaged in manufacturing creamery butter are classified in Industry 2021, natural cheese in Industry 2022, and dried or powdered milk in Industry 2023.	7.4	90	72
203	CANNING, PRESERVING, AND FREEZING			
2031	Canned sea food Establishments primarily engaged in cooking and canning fish, shrimp, oysters, clams, crabs, and other sea foods. Establishments primarily engaged in shucking and packing fresh oysters in nonsealed containers are classified in trade industries.	20.2	91	96
2032	Cured fish Establishments primarily engaged in smoking, salting, drying, or otherwise curing fish for the trade.	2.4	97	88
2033	Canning and preserving, except fish (<i>Includes SIC Industry 2033, Canned fruits, vegetables, and soups; preserves, jams and jellies; canned poultry and chicken soup from 2015, Poultry and small game dressing and packing, wholesale; and mincemeat from 2099; Food preparations, not elsewhere classified</i>) Establishments primarily engaged in canning fruits and vegetables, and fruit and vegetable juices (including soups), and in manufacturing preserves, jams, and jellies. Important products of the industry include canned vegetables (including canned baked beans, and tomato cocktail); fruit and vegetable juices (canned, bottled, and in bulk); canned spaghetti; canned soups (except sea foods—Industry 2031); canned poultry products; canned fruits (including fruit salad and fruit cocktail); preserves, jams, jellies, fruit butters, and maraschino cherries.	136.0	91	95
2034	Dehydrated fruits and vegetables (<i>Dried and dehydrated fruits and vegetables</i>) Establishments primarily engaged in sun-drying or artificially dehydrating fruits and vegetables, including packaged soup mix prepared from dehydrated vegetables.	4.0	96	90
2035	Pickles and sauces (<i>Includes SIC Industry 2035, Pickled fruits and vegetables, vegetable sauces and seasonings, and salad dressings; and sandwich spread—salad dressing base, from 2099, Food preparations, not elsewhere classified</i>) Establishments primarily engaged in pickling, brining, and sulphuring fruits and vegetables, and in manufacturing salad dressings, vegetable relishes, sauces, and seasonings. Important products of this industry include pickles; ketchup (canned, bottled, and in bulk); brined and sulphured fruits and vegetables; prepared horseradish; sauerkraut in bulk; prepared mustard; tomato chili and other vegetable sauces; mayonnaise; cooked salad dressing and raw salad dressings, such as French, Thousand Island, and Russian; sandwich spread, salad dressing base. The industry includes salting stations producing brined pickle stock, and finishing plants at which the stock is treated with vinegar, spices, etc.	21.7	88	70

See footnotes at end of table.

CENSUS OF MANUFACTURES: 1947

MAJOR GROUP 20—FOOD AND KINDRED PRODUCTS—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
203	CANNING, PRESERVING, AND FREEZING—Continued			
2037	Frozen foods (<i>Frozen fruits, vegetables, and sea foods</i>)----- Establishments primarily engaged in quick-freezing and cold-packing (freezing) vegetables, fruits, fish, and shellfish. The industry does not include establishments primarily engaged in packing fruits and vegetables for freezing, but not freezing the product; cold storage warehouses freezing foods for others; farms and ranches producing frozen foods; nor frozen food locker plants and other establishments freezing for individual consumers.	17.4	89	83
204	GRAIN-MILL PRODUCTS			
2041	Flour and meal (<i>Flour and other grain-mill products</i>)----- Establishments primarily engaged in milling flour or meal from grain, except rice (Industry 2044). Such flour and grain mills may also produce blended and prepared flours, principally from products ground in the same establishment. Important products of this industry include wheat flour (white; semolina; farina; granular; graham; whole-wheat; blended, phosphated, enriched, self-rising, and other prepared flour); rye, buckwheat, corn and other flour; corn meal; corn grits and flakes for brewers' use; and bran and middlings.	39.5	92	95
2042	Prepared animal feeds (<i>Prepared feeds for animals and fowls</i>)----- Establishments primarily engaged in manufacturing prepared feeds for animals and fowls. Prepared feeds include those made from milled grains; animal, marine, and vegetable proteins; alfalfa meals, bone meal, calcium carbonate, manganese, and other mineral supplements; fish liver oils, distillers' solubles, and other vitamin supplements. Some of these establishments grind some or all of the grain they use, and others purchase all their materials. Establishments primarily engaged in custom grinding of feeds are not included in manufacturing.	55.3	94	89
2043	Cereal preparations ----- Establishments primarily engaged in manufacturing breakfast foods, coffee substitutes, and other cereal preparations from grain, including flaked corn and wheat, shredded and cracked wheat, rolled oats and puffed wheat and rice. Establishments primarily engaged in manufacturing corn grits and hominy for human consumption are classified in Industry 2041.	11.3	68	87
2044	Rice cleaning and polishing ----- Establishments primarily engaged in cleaning and polishing rice, and in manufacturing rice flour or meal. Important products of this industry include brown rice, milled rice (including polished rice), rice polish, rice bran, and rice flour. Rice mills doing business on a custom, exchange, or toll basis are included in this industry.	4.1	100	100
2045	Blended and prepared flour ----- Establishments primarily engaged in the preparation of self-rising or blended flour from purchased flour. Important products of this industry include plain blended flour, and phosphated, self-rising, and other kinds of prepared flour such as biscuit, cake, doughnut, and pancake flour. Establishments primarily engaged in grinding flour from grain are classified in Industry 2041.	3.1	81	67
205	BAKERY PRODUCTS			
2051	Bread and other bakery products (<i>Bread and other bakery products—except biscuit, crackers, and pretzels</i>)----- Establishments primarily engaged in manufacturing bread, cakes, hand-made cookies, doughnuts, pies, pastries, and similar "perishable" bakery products. Establishments primarily engaged in producing "dry" bakery products such as biscuit, crackers, and pretzels are classified in Industry 2052. Independent bakeries selling chiefly at retail on the manufacturing premises are not included in manufacturing.	233.3	98	100
2052	Biscuit, crackers, and pretzels ----- Establishments primarily engaged in manufacturing biscuit (except raised biscuit), crackers, sponge goods, sweet goods, machine-made cookies, pretzels, and similar "dry" bakery products. Establishments primarily engaged in producing "perishable" bakery products are classified in Industry 2051.	46.1	96	93
206	SUGAR			
2061	Raw cane sugar (<i>Cane sugar—except refining only</i>)----- Establishments primarily engaged in manufacturing raw sugar, sirup, or finished (granulated or clarified) cane sugar from sugar cane. Sugar refineries primarily producing refined cane sugar from raw sugar are classified in Industry 2062.	4.6	97	100

See footnotes at end of table.

MAJOR GROUP 20—FOOD AND KINDRED PRODUCTS—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
206	SUGAR—Continued			
2062	Cane-sugar refining Establishments primarily engaged in refining purchased raw cane sugar.	17.4	100	100
2063	Beet sugar Establishments primarily engaged in manufacturing sugar from sugar beets.	13.4	100	100
207	CONFECTIONERY AND RELATED PRODUCTS			
2071	Confectionery products (<i>Candy and other confectionery products</i>) Establishments primarily engaged in manufacturing candy and other confections, such as chocolate candies (fancy package, bulk, or count), chocolate-covered bars, marshmallows, lozenges, fudge, candied and crystallized fruits, candy-covered nuts, salted nuts, stuffed dates, popcorn balls, and related products. Establishments primarily engaged in manufacturing solid chocolate bars are classified in Industry 2072, and chewing gum in Industry 2073. Retail shops which sell most of the candy they make at retail from the manufacturing premises are not included in manufacturing.	75.2	97	97
2072	Chocolate and cocoa products Establishments primarily engaged in manufacturing chocolate and cocoa butter from cocoa beans, and in the further manufacture of cocoa, solid chocolate bars, and chocolate coatings. Important products of this industry include chocolate (unsweetened, sweet, milk), chocolate coatings (sweet, milk, and liquor), powdered cocoa (unsweetened, sweetened, or mixed with other substances), cocoa butter, and chocolate sirups. Establishments primarily engaged in manufacturing instant chocolate and cocoa from purchased chocolate and cocoa are classified in Industry 2099; and chocolate candies (fancy package, bulk, or count), in Industry 2071.	9.6	99	100
2073	Chewing gum Establishments primarily engaged in the manufacture of chewing gum from such materials as crude gum or chicle, essential oils, flavoring extracts, sugar, etc.	6.9	(^d)	(^d)
208	BEVERAGES			
2081	Bottled soft drinks (<i>Bottled soft drinks and carbonated waters</i>) Establishments primarily engaged in manufacturing bottled soft drinks (nonalcoholic beverages) and carbonated waters. Establishments primarily engaged in manufacturing fruit and vegetable juices are classified in Industry 2033, fruit sirups for flavoring in Industry 2095, and cider in Industry 2096. Establishments primarily engaged in bottling natural spring waters are classified in trade industries.	79.4	99	99
2082	Malt liquors Establishments primarily engaged in manufacturing all kinds of malt liquors such as ale, beer, porter, and stout and malt extract. Establishments primarily engaged in bottling purchased malt liquors are classified in trade industries.	82.5	100	99
2083	Malt Establishments primarily engaged in manufacturing malt from barley and other grains.	2.5	100	100
2084	Wines and brandy (<i>Includes SIC Industry 2084, Wines; and brandy from 2085, Distilled, rectified, and blended liquors</i>) Establishments primarily engaged in manufacturing wines, brandy, and fruit spirits for wine fortification. Establishments primarily engaged in bottling purchased wines, but which do not manufacture or blend wines, are classified in trade industries.	7.7	(²)	(²)
2085	Distilled liquors, except brandy (<i>Part of SIC Industry 2085, Distilled, rectified, and blended liquors [excludes brandy]</i>) Establishments primarily engaged in manufacturing alcoholic liquors (except brandy) by distillation and rectification, and in manufacturing cordials and alcoholic cocktails by blending processes or by mixing liquors and other ingredients. Important products of this industry include grain alcohol (wine spirits), straight and blended whiskies, rum, gin, cordials, liqueurs, and prepared alcoholic cocktails. Establishments primarily engaged in manufacturing brandy are classified in Industry 2084; industrial alcohol, in Industry 2829; and those only bottling purchased liquors, in trade industries.	30.4	99	99
209	MISCELLANEOUS FOOD PREPARATIONS			
2091	Leavening compounds (<i>Baking powder, yeast, and other leavening compounds</i>) Establishments primarily engaged in manufacturing baking powder, yeast, and other compounds used for leavening purposes.	3.1	(^d)	(^d)

See footnotes at end of table.

MAJOR GROUP 20—FOOD AND KINDRED PRODUCTS—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
209	MISCELLANEOUS FOOD PREPARATIONS—Continued			
2092	Shortening and cooking oils (<i>Shortening and other cooking and edible fats and oils, not elsewhere classified</i>) Establishments primarily engaged in manufacturing edible vegetable and compound shortenings, vegetable cooking oils, salad oils, and other refined table oils, not elsewhere classified, by further processing of purchased animal and vegetable oils. Establishments primarily engaged in producing oleomargarine are classified in Industry 2093, corn oil in Industry 2094, and cottonseed, linseed, soybean, marine, and other animal and vegetable oils in Group 288.	8.0	69	95
2093	Oleomargarine Establishments primarily engaged in manufacturing oleomargarine, margarine, nut margarine, etc.	2.6	81	73
2094	Corn products (<i>Corn sirup, corn sugar, corn oil, and starch</i>) Establishments primarily engaged in manufacturing sirup, sugar, oil, and starch from corn. Establishments primarily engaged in manufacturing potato, rice, wheat, root, and other starches are also included in this industry.	12.3	88	96
2095	Flavorings (<i>Flavoring extracts and flavoring sirups, not elsewhere classified</i>) Establishments primarily engaged in manufacturing flavoring extracts, sirups, and fruit juices, not elsewhere classified, for soda fountain use or for the manufacture of soft drinks, and colors for bakers' and confectioners' use. Important products of this industry include flavoring extracts; flavoring concentrates; flavoring powders and pastes; burnt-sugar and other food colors; flavoring sirups; and crushed fruit for fountain use.	11.7	94	90
2096	Vinegar and cider Establishments primarily engaged in manufacturing vinegar and cider in factories, not including small custom mills or those located on farms which are classified in Agriculture.	1.0	92	37
2097	Manufactured ice Establishments primarily engaged in manufacturing ice for sale. Establishments primarily engaged in manufacturing dry ice are classified in Industry 2896, and the harvesting and storage of natural ice, in trade industries.	46.5	100	98
2098	Macaroni and spaghetti (<i>Macaroni, spaghetti, vermicelli, and noodles</i>) Establishments primarily engaged in manufacturing macaroni, spaghetti, vermicelli, and noodles.	8.0	98	99
2090	Liquid, frozen, and dried eggs (<i>Part of SIC Industry 2099, Food preparations, not elsewhere classified</i>) Establishments primarily engaged in the processing of shell eggs into liquid, frozen, canned, or dried eggs.	9.8	81	79
2099	Food preparations, n.e.c. (<i>Part of SIC Industry 2099, Food preparations, not elsewhere classified [excludes liquid, frozen, and dried eggs; mincemeat; and sandwich spread, salad dressing base]</i>) Establishments primarily engaged in manufacturing prepared foods and miscellaneous food specialties, not elsewhere classified, such as baked beans (not canned); bakers', confectioners', and household supplies (including chili pepper and powder, desiccated and shredded coconut, marshmallow creme, pie and cake fillings, and powdered sugar); bouillon cubes; brown bread (canned, Boston, and other); instant chocolate and cocoa; ready-to-mix desserts; "health foods;" ice cream cones and wafers; Italian, Spanish, Mexican, and Chinese cakes and other "native" preparations; meat pies; molasses (mixed or blended); peanut products (except peanut candy and salted peanuts); pectin; potato chips; ravioli; spices and meat seasonings; and sweetening sirups, including honey, maple sirup, and sorghum. Establishments primarily engaged in roasting coffee are included in this industry. Establishments primarily engaged in processing eggs are classified in Industry 2090, mincemeat in Industry 2033, and sandwich spread (salad dressing base) in Industry 2035.	47.8	94	91

See footnotes at end of table.

MAJOR GROUP 21—TOBACCO MANUFACTURES

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
	The Major Group as a Whole This major group includes establishments engaged in manufacturing cigarettes, cigars, smoking and chewing tobacco, and snuff, and in stemming and redrying tobacco. The manufacture of insecticides from tobacco byproducts is included in Major Group 28.			
211	CIGARETTES			
2111	Cigarettes..... Establishments primarily engaged in manufacturing cigarettes.	27.7	(d)	(d)
212	CIGARS			
2121	Cigars..... Establishments primarily engaged in manufacturing cigars.	47.1	99	100
213	CHEWING AND SMOKING TOBACCO			
2131	Chewing and smoking tobacco (<i>Tobacco—chewing and smoking; and snuff</i>)..... Establishments primarily engaged in manufacturing chewing and smoking tobacco and snuff.	11.1	98	86
214	TOBACCO STEMMING AND REDRYING			
2141	Tobacco stemming and redrying..... Establishments primarily engaged in the stemming and redrying of tobacco.	25.9	96	98

MAJOR GROUP 22—TEXTILE MILL PRODUCTS

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
	The Major Group as a Whole This major group includes establishments engaged in performing any of the following operations, regardless of the type of fiber used: (1) manufacturing yarn, thread, cordage, and twine; (2) manufacturing woven fabric, carpets and rugs, braids, laces, knit fabric, knit garments, and other products from yarn; (3) dyeing and finishing fibers, yarn, and fabric; and (4) coating, waterproofing, and otherwise treating fabric. This classification makes no distinction between the two types of organizations which operate in the textile industry; namely, the "regular" or "inside" mill which purchases materials, produces textiles and related articles within the establishment, and sells the finished products, and the "contract" or "commission" mill which processes materials owned by others. Establishments weaving or knitting fabrics and also manufacturing finished apparel or other fabricated textile products in the same establishment are included in this major group; those manufacturing apparel and other fabricated textile products from fabrics knit or woven elsewhere are classified in Major Group 23. Establishments primarily engaged in the sponging or shrinking of cloth for the trade, or employing home workers for hand-knitting or hand-weaving of textile products, are included in Industry 2399. The rubberizing of fabrics is classified in Major Group 30. Jobbers or converters who do no manufacturing but who assign materials to contract mills for processing are included in certain industries (especially Industries 2211 and 2253) of this major group where they account for a relatively significant part of the total cost of materials or value of shipments.			
221	WOOLEN AND WORSTED MANUFACTURES	8.7	97	68
2211	Scouring and combing plants..... Establishments primarily engaged in processing textile fibers to prepare them for spinning. Important processes included in this industry are wool scouring, carbonizing, and blending of wool, and the manufacture of tops on worsted combs from wool, rayon, or other synthetic fibers.			
2212	Yarn mills, wool, except carpet (<i>Part of SIC Industry 2221, Yarn mills</i>)..... Establishments primarily engaged in spinning, twisting, winding, or spooling yarn, except carpet and rug yarn, on the woolen or worsted system. Both weaving and knitting yarns, made by the woolen, Bradford, or French system, are included. Establishments primarily engaged in manufacturing wool carpet and rug yarns are classified in Industry 2271.	33.2	90	81

See footnotes at end of table.

MAJOR GROUP 22—TEXTILE MILL PRODUCTS—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
221	WOOLEN AND WORSTED MANUFACTURES—Continued			
2213	Woolen and worsted fabrics (<i>SIC Industry 2232, Broad-woven fabric mills, woolen and worsted</i>) Establishments primarily engaged in weaving woolen and worsted fabrics over 12 inches in width. Important products of this industry include woolen and worsted apparel fabrics, household fabrics, and industrial and mechanical fabrics; and woven felts and hair cloth. Establishments primarily engaged in weaving wool carpets and rugs are classified in Industry 2271.	132.3	90	96
2216	Finishing wool textiles (<i>SIC Industry 2262, Dyeing and finishing woolen and worsted goods</i>)—Establishments primarily engaged in dyeing and finishing woven woolen or worsted fabrics, or in dyeing wool, tops, or yarn.	5.8	(³)	4 60
222	YARN AND THREAD MILLS, EXCEPT WOOL			
2222	Yarn throwing mills Establishments primarily engaged in throwing or twisting filament yarn of silk, rayon, or other synthetic fibers.	14.9	n.a.	5 49
2223	Thread mills Establishments primarily engaged in manufacturing thread of cotton, silk, rayon, or other synthetic fibers. Important products of this industry include sewing thread for industrial and for home use, and crochet, darning, embroidery, and hand-knitting threads.	14.7	85	89
2224	Yarn mills, cotton system (<i>Part of SIC Industry 2221, Yarn mills</i>) Establishments primarily engaged in spinning yarn on the cotton system from cotton, wool, silk, rayon, or other synthetic staple fibers. Establishments primarily engaged in twisting, winding, or spooling cotton yarn are also included. Important products include weaving, machine-knitting, hand-knitting, crochet, darning, and embroidery yarns.	92.3	n.a.	5 21
2225	Yarn mills, silk system (<i>Part of SIC Industry 2221, Yarn mills</i>) Establishments primarily engaged in spinning yarn on the silk system from silk, rayon, or other synthetic staple fibers. Establishments engaged primarily in winding silk, rayon, or other synthetic yarns are also included. Important products include weaving and machine-knitting yarns.	1.8	n.a.	86
223	COTTON AND RAYON BROAD-WOVEN FABRICS			
2233	Cotton broad-woven fabrics (<i>Part of SIC Industry 2231, Broad-woven fabric mills—cotton, silk, and synthetic fiber</i>) Establishments primarily engaged in weaving cotton fabrics over 12 inches in width. This industry also includes establishments primarily engaged in manufacturing tire cords and fabrics, regardless of fiber content. Important products of this industry include duck, osnaburgs, sheetings, print cloth yarn fabrics, napped fabrics, colored yarn fabrics, fine cotton goods, and bedspread, drapery, and upholstery fabrics. Establishments primarily engaged in weaving cotton carpets and rugs are classified in Industry 2273.	357.4	92	96
2234	Rayon and related broad-woven fabrics (<i>Part of SIC Industry 2231, Broad-woven fabric mills—cotton, silk, and synthetic fiber</i>) Establishments primarily engaged in weaving fabrics over 12 inches in width, except tire fabrics, of silk, rayon, or other synthetic fibers. Establishments primarily engaged in weaving carpets and rugs from these fibers are classified in Industry 2273; and those primarily making tire fabrics, in Industry 2233.	97.6	85	95
224	NARROW FABRIC MILLS			
2241	Narrow fabric mills (<i>Narrow fabrics and other smallwares mills—cotton, wool, silk, and synthetic fiber</i>) Establishments primarily engaged in weaving or braiding fabrics 12 inches or narrower in width of cotton, wool, silk, rayon, or other synthetic fibers. Establishments primarily engaged in weaving or braiding fabrics 12 inches or narrower in width of elastic yarn are also included in this industry. Important products of this industry include fabric belting (mechanical and apparel), ribbons, tapes, bindings, and gimps; woven labels, hatbands, elastic and nonelastic webbing, covered rubber yarns and threads, and fabric lacings.	27.7	96	98
225	KNITTING MILLS			
2251	Full-fashioned hosiery mills Establishments primarily engaged in knitting, dyeing, or finishing full-fashioned hosiery.	70.0	94	98

See footnotes at end of table.

MAJOR GROUP 22—TEXTILE MILL PRODUCTS—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
225	KNITTING MILLS—Continued			
2252	Seamless hosiery mills Establishments primarily engaged in knitting, dyeing, or finishing seamless (circular-knit) hosiery.	64.8	96	91
2253	Knit outerwear mills Establishments primarily engaged in knitting outerwear, or in manufacturing outerwear from knit fabric produced in the same establishment. Jobbers who do no manufacturing but who assign materials to knit outerwear mills for processing, are also included in this industry. Important products of this industry include sweaters, bathing suits, dresses, and headwear. Establishments primarily engaged in hand-knitting outerwear for the trade are included in this industry. Establishments primarily engaged in manufacturing gloves and mittens are classified in Industry 2255, Group 238, or Group 315, and those manufacturing outerwear from purchased knit fabric in Major Group 23.	34.8	91	82
2254	Knit underwear mills Establishments primarily engaged in knitting underwear and nightwear, or in manufacturing underwear and nightwear from knit fabric produced in the same establishment. Establishments primarily engaged in manufacturing underwear and nightwear from purchased knit fabric are classified in Major Group 23.	40.6	87	70
2255	Knit glove mills Establishments primarily engaged in knitting or crocheting gloves and mittens, or in manufacturing gloves and mittens from knit fabric produced in the same establishment. Establishments primarily engaged in manufacturing gloves and mittens from purchased knit fabric are classified in Group 238.	5.2	92	38
2256	Knit-fabric mills Establishments primarily engaged in knitting tubular or flat fabric (including warp-knit mosquito netting) and in dyeing or finishing knit fabric.	14.2	93	83
2259	Knitting mills, n.e.c. Establishments primarily engaged in knitting articles, not elsewhere classified, such as knit curtains, washcloths, dishcloths, and towels.	1.0	98	89
226	FINISHING TEXTILES, EXCEPT WOOL			
2261	Finishing textiles, except wool (<i>Dyeing and finishing textiles, except woolen and worsted textiles and knit goods</i>) Establishments primarily engaged in bleaching, dyeing, printing, finishing, or otherwise converting fabrics, yarn, thread, or raw stock, other than woolen and worsted. Establishments primarily engaged in dyeing or finishing knit goods are classified in Group 225, and woolen and worsted goods in Industry 2216.	78.0	(³)	40
227	CARPETS AND RUGS			
2271	Wool carpets, rugs, and carpet yarn Establishments primarily engaged in manufacturing carpets and rugs made wholly or in part of woolen or worsted yarn. The industry also includes establishments primarily engaged in spinning woolen or worsted yarns for use in carpets and rugs. Important products of the industry include carpet yarns and Axminster, Wilton, and velvet carpets and rugs.	40.1	(²)	(¹)
2273	Carpets and rugs, n.e.c. (<i>Carpets, rugs, and mats from fiber, except wool</i>) Establishments primarily engaged in manufacturing rugs, carpets, art squares, floor matting, and door mats and matting, from fibers other than wool. Materials used include cotton, goat and cattle hair, jute, sisal, rags, twisted paper, grasses, reeds, and coir (cocoa fiber).	7.1	84	86
2274	Hard-surface floor coverings (<i>Linoleum, asphalted-felt-base, and other hard-surface floor coverings, not elsewhere classified</i>) Establishments primarily engaged in manufacturing linoleum, cork carpets, asphalted-felt-base, and other hard-surface floor coverings, not elsewhere classified. Establishments primarily engaged in manufacturing rubber floor covering are classified in Industry 3099, and asphalt floor tile, in Industry 3292.	10.1	94	100
228	HATS (EXCEPT CLOTH AND MILLINERY)			
2281	Fur-felt hats and hat bodies Establishments primarily engaged in manufacturing fur-felt hat bodies from hatters' fur, in manufacturing finished fur-felt hats from hat bodies produced in the same establishment and in manufacturing men's and boys' finished fur-felt hats from purchased hat bodies. Establishments primarily engaged in manufacturing millinery from purchased fur-felt hat bodies are classified in Industry 2351.	13.0	94	97

See footnotes at end of table.

CENSUS OF MANUFACTURES: 1947

MAJOR GROUP 22—TEXTILE MILL PRODUCTS—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
228	HATS (EXCEPT CLOTH AND MILLINERY)—Continued			
2282	Wool-felt hats and hat bodies Establishments primarily engaged in manufacturing wool-felt hat bodies from raw wool and wool waste, in manufacturing wool-felt hats from hat bodies produced in the same establishment, and in manufacturing men's and boys' finished wool-felt hats from purchased hat bodies. Establishments primarily engaged in manufacturing millinery from purchased wool-felt hat bodies are classified in Industry 2351.	4.5	1 76	97
2283	Straw hats Establishments primarily engaged in manufacturing straw hat bodies, in manufacturing finished straw hats from hat bodies produced in the same establishment, and in manufacturing men's and boys' finished straw hats from purchased hat bodies. Establishments primarily engaged in manufacturing millinery from purchased straw hat bodies are classified in Industry 2351.	2.4	83	74
2284	Hatters' fur Establishments primarily engaged in producing hatters' fur for use as material in manufacturing fur-felt hat bodies.	1.5	(^d)	(^d)
229	MISCELLANEOUS TEXTILE GOODS			
2291	Felt goods, n.e.c. (Felt goods, except woven felts and hats) Establishments primarily engaged in manufacturing insulating and automotive felts, under-rug mats, and other felt goods, from wool, hair, and jute, by means of heat, moisture, and pressure, or by the needle-loom process. Establishments primarily engaged in manufacturing woven felts and haircloth are classified in Industry 2213, and those manufacturing felt hats in Group 228.	4.7	1 95	97
2292	Lace goods Establishments primarily engaged in manufacturing lace-machine products such as levers laces, bobbinet, Nottingham lace (curtain nets, curtains, bedspreads, table covers), and Barmen lace. This industry also includes establishments primarily engaged in dyeing and finishing lace goods. Establishments primarily engaged in manufacturing machine embroideries are classified in Industries 2397 and 2398.	8.6	94	97
2293	Paddings and upholstery filling Establishments primarily engaged in manufacturing batting, padding, wadding, and upholstery filling from curled hair, cotton, moss, hemp tow, flax tow, kapok, and related materials. Establishments primarily engaged in manufacturing excelsior pads and wrappers are classified in Industry 2425.	8.2	96	92
2294	Processed textile waste (Processed waste and recovered fibers) Establishments primarily engaged in processing textile-mill waste for spinning and other uses, and in recovering cotton, wool, rayon, silk, and other fibers from clippings and rags. Establishments primarily engaged in manufacturing oakum are also included in this industry. Establishments primarily producing wiping rags are not included in manufacturing.	5.8	94	91
2295	Coated fabrics, except rubberized (Artificial leather, oilcloth, and other impregnated and coated fabrics, except rubberized) Establishments primarily engaged in manufacturing artificial leather, oilcloth, and other coated and impregnated fabrics, and in the special finishing of textiles such as the waxing of cloth and the varnishing of cambric and buckram. Establishments primarily engaged in manufacturing rubberized fabrics are classified in Industry 3099.	8.7	91	73
2297	Jute, except felt, and linen goods (Includes SIC Industry 2296, Linen goods and 2297, Jute goods—except felt) Establishments primarily engaged in manufacturing flax yarn and thread and fabrics of linen and linen-and-cotton mixtures, and establishments primarily engaged in manufacturing jute yarn and jute goods such as fabrics, bagging, and webbing. Establishments primarily engaged in manufacturing jute felts are classified in Industry 2291, and flax and jute cordage and twine in Industry 2298.	5.3	82	89
2298	Cordage and twine Establishments primarily engaged in manufacturing rope, cable, cordage, twine, and related goods, from hemp, jute, cotton, paper, flax, and other fibers.	16.0	88	86
2299	Textile goods, n.e.c. Establishments primarily engaged in manufacturing textile goods, not elsewhere classified.	2.7	82	64

See footnotes at end of table.

MAJOR GROUP 23—APPAREL AND RELATED PRODUCTS

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
	The Major Group as a Whole This major group, known as the cutting-up and needle trades, includes establishments producing clothing and related fabricated products by cutting and sewing purchased woven or knit fabric. All types of textiles are utilized, as well as leather, rubberized fabrics, fur, and other materials. This classification makes no distinction between the two types of organizations which operate in the apparel industry; namely, the "regular" or "inside" factory which purchases materials, manufactures clothing and related articles, and sells the finished products, and the "contract" factory which manufactures apparel from materials owned by others. Jobbers who do no manufacturing but who assign materials to contract factories for fabrication are included in certain industries of this major group where they account for a relatively significant part of the total cost of materials and value of shipments. A relatively large number of jobber establishments are included in each of the following industries: 2311, 2321, 2327, 2329, 2331, 2333, 2335, 2336, 2338, 2339, 2341, 2363, 2369, 2384, and 2385. Custom tailors and dressmakers are classified in nonmanufacturing industries.			
231	MEN'S AND BOYS' SUITS AND COATS	146.8	92	97
2311	Men's and boys' suits and coats (<i>Men's, youths', and boys' suits, coats, and overcoats</i>)----- Establishments primarily engaged in manufacturing men's, youths', and boys' suits, coats, and overcoats. Establishments primarily engaged in manufacturing uniforms (military, policemen's, firemen's, etc.) are also included in this industry. Establishments primarily engaged in manufacturing men's work and sports garments are classified in Group 232.	3.6	99	99
2312	Suit and coat findings ----- Establishments primarily engaged in manufacturing suit and coat findings such as coat fronts, interlinings, collar linings, trouser waistbands, and shoulder pads, or in making buttonholes for men's, youths', and boys' coats and suits.			
232	MEN'S AND BOYS' FURNISHINGS			
2321	Men's dress shirts and nightwear (<i>Men's, youths', and boys' shirts—except work shirts; collars, and nightwear</i>)----- Establishments primarily engaged in manufacturing men's, youths', and boys' shirts, collars, and nightwear cut and sewed from purchased woven or knit fabric. Establishments primarily engaged in manufacturing work shirts are classified in Industry 2328. Knitting mills primarily engaged in manufacturing nightwear are classified in Industry 2254.	94.3	92	94
2322	Men's and boys' underwear (<i>Men's, youths', and boys' underwear</i>)----- Establishments primarily engaged in manufacturing men's, youths', and boys' underwear cut and sewed from purchased woven or knit fabric. Knitting mills primarily engaged in manufacturing underwear are classified in Industry 2254.	7.3	95	21
2323	Men's and boys' neckwear (<i>Men's, youths', and boys' neckwear</i>)----- Establishments primarily engaged in manufacturing men's, youths', and boys' neckties, scarfs, and mufflers cut and sewed from purchased woven or knit fabric. Knitting mills primarily engaged in manufacturing neckties, scarfs, and mufflers are classified in Industry 2253.	10.7	97	93
2325	Men's and boys' cloth hats and caps (<i>Men's, youths', and boys' cloth hats and caps</i>)----- Establishments primarily engaged in manufacturing men's, youths', and boys' hats and caps from purchased knit or woven fabric, such as baseball and other cloth sport hats; chauffeurs', policemen's, and other uniform hats; and miscellaneous cloth hats and caps. Establishments primarily engaged in manufacturing fur felt hats are classified in Industry 2281, wool-felt hats in Industry 2282, and straw hats in Industry 2283. Knitting mills primarily engaged in manufacturing caps are classified in Industry 2253.	5.5	96	91
2326	Hat and cap materials ----- Establishments primarily engaged in manufacturing hat and cap findings, such as cap visors, sweatbands, and trimmings from purchased materials. Establishments primarily engaged in tip printing or stamping are also included in this industry. Establishments primarily engaged in manufacturing hatters' fur are classified in Industry 2284.	1.1	97	99
2327	Separate trousers (<i>Men's, youths', and boys' separate trousers</i>)----- Establishments primarily engaged in manufacturing men's, youths', and boys' separate trousers. Establishments primarily engaged in manufacturing work pants are classified in Industry 2329.	48.3	84	70

See footnotes at end of table.

MAJOR GROUP 23—APPAREL AND RELATED PRODUCTS—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
232	MEN'S AND BOYS' FURNISHINGS—Continued			
2328	Work shirts ----- Establishments primarily engaged in manufacturing work shirts.	12.1	77	67
2329	Men's and boys' clothing, n.e.c. (<i>Men's, youths', and boys' work, sport, and other clothing, not elsewhere classified</i>) ----- Establishments primarily engaged in manufacturing men's, youths', and boys' work, sport and other clothing, not elsewhere classified. Important products of this industry include overalls, work pants, industrial garments, washable service apparel, wash suits, oiled-fabric work garments, mackinaws, lumberjackets, blanket-lined coats, ski and snow suits, and hunting and riding garments. Establishments primarily engaged in manufacturing separate trousers are classified in Industry 2327, and leather and sheep-lined garments in Industry 2386. Knitting mills primarily engaged in manufacturing outerwear are classified in Industry 2253.	74.1	81	86
233	WOMEN'S AND MISSES' OUTERWEAR			
2331	Blouses and waists (<i>Women's and misses' blouses and waists</i>) ----- Establishments engaged primarily in manufacturing women's and misses' blouses, waists, and shirts from textile fabrics of all types.	32.8	93	87
2333	Dresses, unit price (<i>Women's and misses' dresses</i>) ----- Establishments primarily engaged in manufacturing women's and misses' dresses and ensemble dresses. The garments manufactured by establishments classified in this industry are usually sold by the piece. Establishments primarily engaged in manufacturing aprons, smocks, hoovers, and house dresses, usually sold by the dozen, are classified in Industry 2334.	133.3	95	97
2334	Dresses, dozen price (<i>Household apparel</i>) ----- Establishments primarily engaged in manufacturing women's and misses' dozen price dresses and household apparel, chiefly of washable fabrics. Important products of this industry include aprons, smocks, hoovers, house dresses, and nurses' and maids' uniforms.	48.7	89	96
2335	Women's suits and coats (<i>Part of SIC Industry 2337, Women's and misses' suits, coats—except fur coats, and skirts</i>) ----- Establishments primarily engaged in manufacturing women's and misses' suits, ensemble suits, and coats other than fur. Establishments primarily engaged in manufacturing fur garments are classified in Industry 2371, and knitting mills primarily engaged in manufacturing outerwear in Industry 2253.	1.3	95	94
2336	Women's skirts (<i>Part of SIC Industry 2337, Women's and misses' suits, coats—except fur coats, and skirts</i>) ----- Establishments primarily engaged in manufacturing women's and misses' skirts from all fabrics.	8.3	77	70
2338	Women's neckwear and scarfs ----- Establishments primarily engaged in manufacturing women's neckwear and scarfs, cut and sewed from purchased woven or knit fabric. Knitting mills primarily engaged in manufacturing neckwear or scarfs are classified in Industry 2253.	2.8	96	96
2339	Women's outerwear, n.e.c. (<i>Women's and misses' outerwear, not elsewhere classified</i>) ----- Establishments primarily engaged in manufacturing women's and misses' outerwear, not elsewhere classified, such as bathing suits, beachwear, slacks, riding habits, and ski suits cut and sewed from purchased woven or knit fabric. Knitting mills primarily engaged in manufacturing outerwear are classified in Industry 2253.	13.3	66	60
234	WOMEN'S AND CHILDREN'S UNDERGARMENTS			
2341	Women's and children's underwear (<i>Women's, misses', children's, and infants' underwear and nightwear</i>) ----- Establishments primarily engaged in manufacturing women's, misses', children's, and infants' underwear and nightwear cut and sewed from purchased woven or knit fabric. Knitting mills primarily engaged in manufacturing underwear and nightwear are classified in Industry 2254.	57.3	95	78
2342	Corsets and allied garments ----- Establishments primarily engaged in manufacturing corsets and corset accessories, brassieres, girdles, foundation garments, and similar body supporting garments. Establishments engaged in manufacturing surgical and orthopedic appliances are classified in Industry 3842.	37.3	95	97

See footnotes at end of table.

MAJOR GROUP 23—APPAREL AND RELATED PRODUCTS—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
235	MILLINERY			
2351	Millinery Establishments primarily engaged in manufacturing women's, misses', children's, and infants' trimmed hats made from felt or straw hat bodies and purchased millinery materials. Establishments primarily engaged in manufacturing fur-felt and wool-felt hat bodies are classified in Group 228, and millinery braid and trimming in Industry 2396.	20.9	99	98
236	CHILDREN'S OUTERWEAR			
2361	Children's dresses (Children's and infants' dresses) Establishments primarily engaged in manufacturing children's and infants' dresses, cut and sewed from purchased woven or knit fabric. Knitting mills primarily engaged in manufacturing dresses are classified in Industry 2253. Establishments primarily manufacturing children's and infants' blouses are also included within this industry.	22.4	93	91
2363	Children's coats (Children's and infants' coats) Establishments primarily engaged in manufacturing children's and infants' coats, coat and legging sets, and snow suits, cut and sewed from purchased woven or knit fabric. Knitting mills primarily engaged in manufacturing outerwear are classified in Industry 2253.	12.4	90	87
2369	Children's outerwear, n.e.c. (Children's and infants' outerwear, not elsewhere classified) Establishments primarily engaged in manufacturing children's and infants' outerwear, not elsewhere classified, such as playsuits, overalls, slacks, beachwear, rompers, and polo, basque and "T-shirts", cut and sewed from purchased woven or knit fabric. Knitting mills primarily engaged in manufacturing outerwear are classified in Industry 2253.	13.3	77	68
237	FUR GOODS			
2371	Fur goods Establishments primarily engaged in manufacturing fur coats and other garments, accessories, and trimmings made of fur. Establishments primarily engaged in manufacturing sheep-lined clothing are classified in Industry 2386; those engaged in making women's fur-trimmed coats, in Industry 2335; and those engaged in the dyeing and dressing of furs, in Industry 3992.	16.2	100	100
238	MISCELLANEOUS APPAREL AND ACCESSORIES			
2381	Fabric and combination dress gloves (Dress and semidress gloves and mittens—fabric, fabric and leather combined) Establishments primarily engaged in manufacturing dress and semidress gloves and mittens, cut and sewed from purchased woven or knit fabric, or these materials combined with leather. Knitting mills primarily engaged in manufacturing gloves and mittens are classified in Industry 2255; establishments primarily engaged in manufacturing leather gloves in Group 315; and those manufacturing rubber gloves in Industry 3099.	5.1	95	57
2382	Fabric and combination work gloves (Work gloves and mittens—fabric, fabric and leather combined) Establishments primarily engaged in manufacturing work gloves and mittens, cut and sewed from purchased woven or knit fabric, or these materials combined with leather. Knitting mills primarily engaged in manufacturing gloves and mittens are classified in Industry 2255; establishments primarily engaged in manufacturing leather gloves in Group 315; and those manufacturing rubber gloves in Industry 3099.	11.0	94	96
2383	Suspenders and garters (Suspenders, garters, and related products) Establishments primarily engaged in manufacturing suspenders, arm bands, garters, hose supporters, and related products. Establishments primarily engaged in manufacturing corsets and allied garments are classified in Industry 2342.	1.7	74	54
2384	Robes and dressing gowns Establishments primarily engaged in manufacturing men's and women's bathrobes, lounging robes, and dressing gowns.	10.9	89	82
2385	Waterproof outer garments (Raincoats and other waterproof outer garments) Establishments primarily engaged in manufacturing raincoats from purchased rubberized fabrics and other waterproof outer garments made from such material as pliofilm and cellophane. Establishments primarily engaged in manufacturing oiled fabric work garments are classified in Industry 2329, and those manufacturing rubber garments made from rubberized fabrics produced in the same establishment are classified in Industry 3099.	8.3	84	77

See footnotes at end of table.

MAJOR GROUP 23—APPAREL AND RELATED PRODUCTS—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
238	MISCELLANEOUS APPAREL AND ACCESSORIES—Continued			
2386	Leather and sheep-lined clothing Establishments primarily engaged in manufacturing leather and sheep-lined garments. Establishments primarily engaged in manufacturing leather gloves and mittens are classified in Group 315, and fur garments in Industry 2371.	4.3	78	80
2387	Belts Establishments primarily engaged in manufacturing men's and women's apparel belts, regardless of material.	9.2	90	95
2388	Handkerchiefs Establishments primarily engaged in manufacturing handkerchiefs. Establishments primarily engaged in manufacturing embroidered handkerchiefs are classified in Industries 2397 and 2398; and lace handkerchiefs, in Industry 2292.	4.6	98	95
2389	Apparel, n.e.c. Establishments primarily engaged in manufacturing apparel, not elsewhere classified, such as academic caps and gowns, vestments, and theatrical costumes.	2.2	96	86
239	MISCELLANEOUS FABRICATED TEXTILES			
2391	Curtains and draperies Establishments primarily engaged in manufacturing curtains and draperies from purchased fabric.	8.0	97	90
2392	Housefurnishings, n.e.c. (<i>Housefurnishings, except curtains and draperies</i>) Establishments primarily engaged in manufacturing housefurnishings from purchased fabric. Important products of this industry include sheets, pillowcases, napkins, table cloths, comfortables, blankets, bedspreads, pillows, laundry bags, mops and dusters, and slip covers. Establishments primarily engaged in manufacturing curtains and draperies are classified in Industry 2391.	40.2	93	88
2393	Textile bags Establishments primarily engaged in manufacturing cotton, burlap, and other textile bags from purchased fabric.	13.9	93	98
2394	Canvas products Establishments primarily engaged in manufacturing awnings, tents, sails, canvas covers, tarpaulins, bags, and canopies from purchased canvas. Establishments primarily engaged in manufacturing canvas products, mainly awnings, for sale at retail, are included in this industry.	10.6	91	93
2395	Tucking, pleating, and hemstitching (<i>Pleating, stitching, and tucking for the trade</i>) Establishments primarily engaged in pleating, hemstitching, tucking, quilting, and appliqueing, and making button holes for the trade. Establishments performing these operations for individual consumers are classified in service industries. Establishments primarily engaged in manufacturing trimmings and art needle work are classified in Industry 2396.	5.9	96	87
2396	Trimmings and art goods (<i>Trimmings, stamped art goods, and art needlework</i>) Establishments primarily engaged in manufacturing trimmings for millinery and other uses, stamped art goods, and art needlework.	15.0	94	96
2397	Schiffli-machine embroideries Establishments primarily engaged in manufacturing Schiffli-machine embroideries, and burnt-out laces.	5.7	98	96
2398	Embroideries, except Schiffli-machine Establishments primarily engaged in manufacturing Swiss loom and other machine-made or hand-made embroideries, except Schiffli-machine embroideries. Establishments primarily engaged in making Schiffli-machine embroideries are classified in Industry 2397.	9.8	97	96
2399	Fabricated textile products, n.e.c. Establishments primarily engaged in manufacturing fabricated textile products, not elsewhere classified, such as automobile seat covers, banners, flags, and pennants. Establishments primarily engaged in the sponging or shrinking of cloth for the trade, or in employing home workers for hand-knitting or hand-weaving of textile products, are also included in this industry.	18.5	88	87

See footnotes at end of table.

MAJOR GROUP 24—LUMBER AND WOOD PRODUCTS, EXCEPT FURNITURE

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
	The Major Group as a Whole			
	This major group includes sawmills, veneer mills, lath mills, shingle mills, cooperage-stock mills, planing mills, and plywood mills engaged in producing lumber and wood basic materials; and establishments engaged in manufacturing finished articles made entirely or mainly of wood or wood substitutes. Certain types of establishments producing wood products are classified elsewhere. For example, furniture and office and store fixtures are classified in Major Group 25; pianos, musical instruments, toys and playground equipment, and caskets and coffins in Major Group 39. Woodworking in connection with construction, in the nature of reconditioning and repair, or performed to individual order, is classified in nonmanufacturing industries. Logging camps and logging contractors (Standard Industrial Classification Industry 2411) are excluded from the scope of the 1947 census. No establishments were classified in Standard Industrial Classification Industry 2429 in 1947.			
242	LUMBER AND TIMBER BASIC PRODUCTS			
2421	Sawmills and planing mills, general Establishments primarily engaged in sawing rough lumber and timber from logs or bolts, or resawing cants, flitches, or lumber into smaller dimensions; planing mills combined with sawmills; and separately operated planing mills which are engaged primarily in producing surfaced lumber and standard workings or patterns of lumber. This industry also includes establishments primarily engaged in sawing lath, railroad ties, and box shooks from logs or bolts. Establishments primarily engaged in manufacturing box shooks or boxes from purchased lumber are classified in Industry 2444, and sash, doors, window and door frames, and other fabricated millwork from purchased lumber in Industry 2431.	380.5	94	98
2422	Veneer mills Establishments primarily engaged in producing veneer of all types and grades. Establishments primarily engaged in the production of veneer which is used in the same establishment for the manufacture of products such as plywood are classified in Industry 2432, fruit and vegetable baskets in Industry 2441, wooden boxes in Industry 2444, and cigar boxes in Industry 2443.	10.5	92	83
2423	Shingle mills Establishments primarily engaged in producing wood shingles, including shake operations.	2.4	100	86
2424	Cooperage stock mills Establishments primarily engaged in producing cooperage stock, including staves, heading and hoops for tight or slack cooperage, whether produced by sawing or splitting. Establishments primarily engaged in manufacturing barrels and other coopered products from stock produced in the same establishment are classified in Industry 2445.	12.3	96	92
2425	Excelsior mills Establishments primarily engaged in manufacturing excelsior, wood-wool, and excelsior pads and wrappers.	1.2	100	97
243	MILLWORK AND RELATED PRODUCTS			
2431	Millwork plants Establishments primarily engaged in manufacturing sash, windows, doors, window and door frames, moldings, mantels, panel work, porch work, stairways, wooden pipe, conduit, tanks and vats, and similar fabricated millwork. Establishments primarily engaged in producing dimension stock, surfaced lumber, and standard workings or patterns of lumber, such as ceiling, partition, siding, matched and shiplapped lumber, and flooring, are classified in Industry 2421. Establishments primarily engaged in manufacturing storm sash and combination window and door screens are classified in Industry 2561.	57.6	87	93
2432	Plywood plants Establishments primarily engaged in manufacturing commercial (hardwood and softwood) plywood, including technical and industrial grades from veneer produced in the same establishment or from purchased veneer. Establishments primarily engaged in manufacturing other grades and types such as fancy and figured, container, and non-manufacturing face plywood are also included in this industry. Establishments producing plywood which is used in the same establishment in the manufacture of end products, such as doors, are classified in Industry 2431, and wood boxes, in Industry 2444.	26.5	94	96

See footnotes at end of table.

MAJOR GROUP 24—LUMBER AND WOOD PRODUCTS, EXCEPT FURNITURE—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
243	MILLWORK AND RELATED PRODUCTS—Continued			
2433	Prefabricated wood products (<i>Prefabricated wooden buildings and structural members</i>)----- Establishments primarily engaged in manufacturing prefabricated wooden buildings, or in producing laminated or fabricated trusses, arches, and other structural members of lumber. Establishments primarily manufacturing prefabricated metal buildings and components are classified in Industry 3441. Contractors engaged in on-the-site construction are not classified as manufacturing establishments.	10.2	92	96
244	WOODEN CONTAINERS			
2441	Fruit and vegetable baskets ----- Establishments primarily engaged in manufacturing till baskets, berry cups, climax baskets, round stave baskets, vegetable hampers, and splint or market baskets made primarily of veneer and splint for shipping and marketing fruits and vegetables.	9.1	91	88
2442	Rattan and willow ware, n.e.c. (<i>Rattan and willow ware, except furniture and fruit and vegetable baskets</i>)----- Establishments primarily engaged in manufacturing articles of rattan, reed, splint, veneer, and willow, such as laundry hampers, clothes baskets, market baskets (except fruit and vegetable baskets—Industry 2441), and small articles such as trays, coasters, table pads, and willow bottle and demijohn covers. Establishments primarily engaged in manufacturing reed and rattan furniture are classified in Industry 2513.	1.1	89	93
2443	Cigar boxes ----- Establishments primarily engaged in manufacturing cigar boxes of wood, or partly of wood, in which cigars are packed for sale. Establishments primarily engaged in manufacturing paper cigar boxes are classified in Industry 2671.	1.9	100	85
2444	Wooden boxes, except cigar boxes ----- Establishments primarily engaged in manufacturing wooden boxes (nailed or wirebound, plain or fabric covered), crates, cases, wooden shipping drums, and carrier trays. Establishments primarily engaged in manufacturing box shooks and wooden trunk slats from purchased lumber are also included in this industry, but establishments primarily engaged in manufacturing cigar boxes are classified in Industry 2443, fruit and vegetable baskets in Industry 2441, and caskets and coffins in Industry 3988.	47.8	96	85
2445	Cooperage ----- Establishments primarily engaged in manufacturing barrels, kegs, tubs, hogsheads, pails, and other containers made of staves, except fruit and vegetable baskets (Industry 2441). Establishments primarily engaged in manufacturing cooperage stock are classified in Industry 2424.	9.2	96	97
249	MISCELLANEOUS WOOD PRODUCTS			
2491	Wood preserving ----- Establishments primarily engaged in treating wood (sawed or planed in other establishments) with creosote or other preservatives to prevent decay and to protect against fire and insects. Establishments primarily engaged in manufacturing wood products which they may also treat with preservatives are not included in this industry.	16.2	(d)	(d)
2492	Lasts and related products ----- Establishments primarily engaged in manufacturing lasts for boots and shoes, last sole patterns, shoe trees and stretchers, and display forms for boots and shoes, regardless of the material used.	2.0	(d)	(d)
2493	Mirror and picture frames ----- Establishments primarily engaged in manufacturing finished picture-frame moldings; in manufacturing frames for mirrors, pictures, photographs, and medallions; and in framing pictures for the trade. Establishments primarily engaged in manufacturing mirror glass are classified in Industry 3231, and the framing of pictures to individual order in nonmanufacturing industries.	3.8	89	92
2499	Wood products, n.e.c. ----- Establishments primarily engaged in turning and shaping wood and manufacturing miscellaneous wood products, not elsewhere classified, such as bakers' wooden equipment, battery separators, carvings, clothespins, cloth-winding and cable reels, dishes and other household and kitchen woodenware, flag poles, wood-flour, furniture turnings, wooden handles, garment hangers, ladders, oars, rolling pins, scaffolds, tailors' pressing blocks, textile machinery turnings, toilet seats (regardless of materials), toothpicks, trays, in-laid veneer work, vehicle stock, and washboards (wooden and part wooden).	43.5	91	94

See footnotes at end of table.

MAJOR GROUP 25—FURNITURE AND FIXTURES

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
	The Major Group as a Whole			
	This major group includes establishments engaged in manufacturing household, office, public-building, professional, and restaurant furniture, office and store fixtures, and window and door screens and shades, and venetian blinds, regardless of the materials used. Establishments primarily engaged in manufacturing beauty and barber shop furniture, except hydraulic chairs (Standard Industrial Classification Industry 3991) are included in this major group. Establishments primarily engaged in the production of millwork are classified in Industry 2431, and woodworking to individual order or in the nature of reconditioning and repair in nonmanufacturing industries.			
251	HOUSEHOLD FURNITURE			
2511	Wood house furniture, except upholstered ----- Establishments primarily engaged in manufacturing wood household furniture commonly used in dwellings. This industry also includes wooden cases and cabinets for radios and sewing machines, kitchen cabinets, camp furniture, nursery furniture, and smoking stands. Establishments primarily engaged in manufacturing upholstered furniture are classified in Industry 2512, and reed and rattan furniture in Industry 2513.	132.7	93	94
2512	Household furniture, upholstered (<i>Includes SIC Industry 2512, Wood household, upholstered; and upholstered metal household furniture from 2514, Metal household furniture</i>)----- Establishments primarily engaged in manufacturing upholstered furniture on wood and metal frames, or manufacturing wood frames for upholstered furniture. Establishments primarily engaged in reupholstering furniture, or upholstering frames to individual order are classified in nonmanufacturing industries.	44.8	92	83
2513	Reed and rattan furniture ----- Establishments primarily engaged in manufacturing reed, rattan, fiber, willow, and other wicker furniture, whether padded or plain.	.8	79	62
2514	Metal house furniture, except upholstered (<i>Part of SIC Industry 2514, Metal household furniture (excludes upholstered metal household furniture)</i>)----- Establishments primarily engaged in manufacturing metal household furniture, except upholstered, of a type commonly used in dwellings.	19.5	82	71
2515	Mattresses and bedsprings ----- Establishments primarily engaged in manufacturing mattresses (including foam-rubber and box-spring mattresses); assembled wire springs (fabric, coil, or box) for use on beds, couches, and cots; and spring cushions. Establishments primarily engaged in manufacturing individual wire springs are classified in Industry 3489.	30.3	76	93
2519	Household furniture, n.e.c. ----- Establishments primarily engaged in manufacturing household furniture except wood, reed, rattan, and metal. Important products of this industry include glass, plastic, and paperboard furniture.	.9	86	80
252	OFFICE FURNITURE			
2521	Wood office furniture ----- Establishments primarily engaged in manufacturing wood office furniture, whether padded, upholstered, or plain. Establishments producing metal office furniture are classified in Industry 2522, and office fixtures in Industry 2541.	6.6	93	81
2522	Metal office furniture ----- Establishments primarily engaged in manufacturing metal office furniture, whether padded, upholstered, or plain. Establishments primarily engaged in manufacturing safes and vaults are classified in Industry 3492, wood office furniture in Industry 2521, and office fixtures in Industry 2541.	14.7	87	92
253	PUBLIC AND PROFESSIONAL FURNITURE			
2531	Public-building furniture (<i>Public-building and related furniture</i>)----- Establishments primarily engaged in manufacturing furniture for schools, theaters, assembly halls, churches, and libraries, and in manufacturing seats for public conveyances. Establishments primarily engaged in manufacturing stone furniture are classified in Industry 3281, and concrete furniture in Industry 3271.	8.9	75	75

See footnotes at end of table.

MAJOR GROUP 25—FURNITURE AND FIXTURES—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
253	PUBLIC AND PROFESSIONAL FURNITURE—Continued			
2532	Professional furniture Establishments primarily engaged in manufacturing furniture especially designed for laboratory, hospital, and other professional uses, such as laboratory work tables, operating tables, and hospital beds. Establishments primarily engaged in manufacturing furniture such as manicure tables, dresserettes, etc., especially designed for use in beauty and barber shops are classified in this industry; but those primarily manufacturing equipment such as hydraulic chairs, hair dryers, permanent waving equipment, etc., are classified in Industry 3991.	5.6	65	64
254	PARTITIONS AND FIXTURES			
2541	Partitions and fixtures (<i>Partitions, shelving, lockers, and office and store fixtures</i>) Establishments primarily engaged in manufacturing from wood, metal, or other materials, prefabricated partitions, shelving, cabinets, show and display cases, office and store fixtures, and related fabricated products including bar fixtures, telephone booths, butchers' fixtures, lockers, display racks and stands, and store and lunchroom window-backs. Establishments primarily engaged in manufacturing refrigerated cabinets, show cases, and display cases, are classified in Industry 3585, and safes and vaults in Industry 3492.	27.7	88	89
256	SCREENS, SHADES, AND BLINDS			
2561	Window and door screens (<i>Window and door screens and weather strip</i>) Establishments primarily engaged in manufacturing window and door screens, (also storm sash and combination screen and storm sash and doors), and weatherstrip, regardless of the materials used. Establishments primarily engaged in manufacturing wire screening are classified in Industry 3489.	9.5	90	73
2562	Window shades Establishments primarily engaged in manufacturing complete window shades, window-shade rollers and fittings, and curtain rods and fixtures, regardless of the materials used.	6.8	69	92
2563	Venetian blinds Establishments primarily engaged in manufacturing venetian blinds regardless of the materials used. Establishments primarily engaged in manufacturing porch shades (except canvas shades and awnings—Industry 2394) are also included in this industry.	9.7	96	92
259	MISCELLANEOUS FURNITURE AND FIXTURES			
2591	Restaurant furniture Establishments primarily engaged in manufacturing furniture especially designed for use in restaurants.	3.4	87	69
2599	Furniture and fixtures, n.e.c. Establishments primarily engaged in manufacturing furniture and fixtures, not elsewhere classified.	.7	89	51

MAJOR GROUP 26—PAPER AND ALLIED PRODUCTS

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
	The Major Group as a Whole This major group includes the manufacture of pulp primarily from wood, and from rags and other fibers; the conversion of these pulps into paper or board; and the manufacture of paper and paperboard into converted paper products such as coated paper, paper bags, paper boxes, cards, and envelopes. . . Certain types of converted paper products are classified elsewhere, such as abrasive paper in Industry 3291, carbon paper in Industry 3955, and photosensitized and blueprint paper in Industry 3861.			

See footnotes at end of table.

MAJOR GROUP 26—PAPER AND ALLIED PRODUCTS—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
261	PULP, PAPER, AND PAPERBOARD			
2611	Pulp mills Establishments primarily engaged in manufacturing pulp from wood or from other materials such as rags, linter, waste paper, and straw.	50.3	99	100
2612	Paper and board mills (<i>Includes SIC Industry 2612, Paper and paperboard mills, except building-paper and building-board mills; and 2613, Building-paper and building-board mills</i>). Establishments primarily engaged in manufacturing paper, paperboard, building paper and building board from wood pulp and other fibers on a standard or modified paper machine.	148.1	100	100
264	PAPER COATING AND GLAZING			
2641	Paper coating and glazing Establishments primarily engaged in manufacturing coated and glazed paper. Chief products of this industry include coated-book (coated off the paper machine), waxed and gummed paper, and waterproof wrapping paper. Establishments primarily engaged in manufacturing paper machine coated paper are classified in Industry 2612, carbon paper in Industry 3955, and photographic and blueprint paper in Industry 3861.	18.1	88	92
265	ENVELOPES			
2651	Envelopes Establishments primarily engaged in manufacturing envelopes of any description (except stationery envelopes) from paper. Establishments primarily engaged in manufacturing papeteries (boxed stationery) are classified in Industry 2699.	13.8	92	95
266	PAPER BAGS			
2661	Paper bags Establishments primarily engaged in manufacturing paper bags of all types, such as grocers, and variety bags and shipping sacks, from paper and similar materials.	22.3	96	86
267	PAPERBOARD CONTAINERS AND BOXES			
2671	Paperboard boxes (<i>Paperboard boxes: folded, set-up, and corrugated</i>). Establishments primarily engaged in manufacturing paperboard containers or boxes from paperboard or fiber stock. Important products of this industry are folding paper boxes and cartons, set-up boxes, and corrugated and solid fiber shipping containers from paperboard or fiber stock.	109.8	97	98
2674	Fiber cans, tubes, drums, etc. (<i>Fiber cans, tubes, drums, and similar products</i>). Establishments primarily engaged in manufacturing fiber cans, cones, cores, mailing cases, ribbon-blocks, spools, tubes, drums, and similar products from paperboard.	9.4	97	93
269	PULP GOODS AND MISCELLANEOUS PAPER PRODUCTS			
2691	Die-cut paper and board (<i>Die-cut paper and paperboard; and cardboard</i>). Establishments primarily engaged in die-cutting paper and paperboard and in manufacturing cardboard by laminating, lining, and surface-coating paperboard. Important products of this industry are bottle caps and tops; index, library, and guide cards; photograph folders, mats, and mounts; and stencil cards for addressing machines.	8.5	90	84
2693	Wallpaper Establishments primarily engaged in designing, printing, and embossing paper for interior walls and ceilings.	5.5	98	100
2694	Pulp goods, pressed and molded Establishments primarily engaged in manufacturing all kinds of pressed and molded pulp goods, such as pulp plates and utensils, and papier-maché articles other than statuary and art goods. Establishments primarily engaged in manufacturing plates and utensils from paperboard are classified in Industry 2699.	1.7	95	86
2699	Converted paper products, n.e.c. Establishments primarily engaged in manufacturing miscellaneous converted paper products, not elsewhere classified, such as toilet paper, facial tissues (handkerchiefs), table napkins, towels, crepe paper, laminated wallboard, and tile board having a presswood base.	62.4	92	87

See footnotes at end of table.

MAJOR GROUP 27—PRINTING AND PUBLISHING

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
	The Major Group as a Whole			
	This major group includes establishments engaged in printing, publishing, and lithographing; bookbinding, paper ruling, and manufacturing blankbooks and loose-leaf devices; and those performing services for the printing trades such as typesetting, photo engraving, and electrotyping. This group includes all publishers regardless of whether or not they do their own printing.			
271	NEWSPAPERS			
2711	Newspapers Establishments primarily engaged in publishing newspapers, or in publishing and printing newspapers. These establishments carry on the various operations necessary for issuing newspapers, including the gathering of news and the preparation of editorials and advertisements, but may or may not perform their own printing. Job printing is frequently carried on by establishments engaged in publishing and printing newspapers, but even though the job printing may be of major importance, such establishments are included in this industry. Establishments not engaged in publishing newspapers, but which print or lithograph newspapers for publishers, are classified in Industry 2751 or 2761.	234.4	94	100
272	PERIODICALS			
2721	Periodicals Establishments primarily engaged in publishing periodicals or in preparing, publishing, and printing periodicals. These establishments carry on the various operations necessary for issuing periodicals, but may or may not perform their own printing. Establishments not engaged in publishing periodicals, but which print or lithograph periodicals for publishers are classified in Industry 2751 or 2761.	68.8	94	98
273	BOOKS			
2731	Books, publishing and printing (<i>Books: publishing, publishing and printing</i>) Establishments primarily engaged in publishing only, or in publishing and printing books and pamphlets. Establishments primarily engaged in printing, or in printing and binding (but not publishing) books and pamphlets are classified in Industry 2732.	39.9	92	93
2732	Book printing Establishments primarily engaged in printing only or in printing and binding books and pamphlets, but not engaged in publishing. Establishments primarily engaged in publishing, or in publishing and printing books and pamphlets are classified in Industry 2731.	11.0	75	42
274	MISCELLANEOUS PUBLISHING			
2741	Miscellaneous publishing Establishments primarily engaged in publishing such products as maps, atlases, sheet music, and directories, or engaged in miscellaneous publishing activities, not elsewhere classified, whether or not engaged in printing. Establishments primarily engaged in printing such products and not engaged in publishing are classified in Industry 2751 or 2761.	12.0	93	78
275	COMMERCIAL PRINTING			
2751	Commercial printing Establishments primarily engaged in commercial or job printing. This industry includes general printing shops as well as shops specializing in printing newspapers and periodicals for others, and those which specialize in gravure, rotogravure, and rotary photo-gravure printing. Establishments primarily engaged in printing books (without publishing) are classified in Industry 2732, and greeting cards in Industry 2771. Establishments primarily engaged in printing from lithographic plates are classified in Industry 2761.	193.4	86	85
276	LITHOGRAPHING			
2761	Lithographing Establishments primarily engaged in preparing lithographic stones or metal lithographic plates, and in printing from such media. The greater part of the work in this industry is performed on a job or custom basis, but in some cases lithographed calendars, commercial forms, maps, posters, decalcomanias, etc., are made for sale. Offset printing, photo-offset printing, and photo-lithographing are also included in this industry. Establishments primarily engaged in lithographing books and pamphlets (without publishing) are classified in Industry 2732, and greeting cards in Industry 2771.	52.2	74	77
277	GREETING CARDS			
2771	Greeting cards Establishments primarily engaged in designing only, manufacturing only, or designing and manufacturing greeting cards for all occasions. These products may be printed, lithographed, etched, or otherwise processed.	18.1	92	87

See footnotes at end of table.

MAJOR GROUP 27—PRINTING AND PUBLISHING—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
278	BOOKBINDING AND RELATED INDUSTRIES			
2781	Bookbinding ----- Establishments engaged in edition, trade, job, and library bookbinding. Establishments primarily engaged in printing and binding books for publishers are classified in Industry 2732.	22.2	84	87
2782	Blankbook and paper ruling ----- Establishments primarily engaged in manufacturing blankbooks such as ledgers, account books, and composition books; salesbooks; receipt pads; check books; inventory and similar blankbooks; and in ruling paper.	8.8	81	67
2783	Loose-leaf binders and devices (<i>Library and loose-leaf binder manufacturing</i>)----- Establishments primarily engaged in manufacturing loose-leaf binders and devices, including library binders.	8.1	75	83
2789	Miscellaneous bookbinding work (<i>Miscellaneous work related to bookbinding</i>)----- Establishments primarily engaged in book or paper bronzing, gilding, and edging; in map and sample mounting; and other services related to bookbinding.	3.4	87	79
279	PRINTING TRADES SERVICE INDUSTRIES			
2791	Typesetting ----- Establishments primarily engaged in machine and hand typesetting for the trade and in advertising typography.	11.5	94	87
2792	Engraving and plate printing ----- Establishments primarily engaged in engraving and etching steel and copper plates; in using these plates to print stationery, visiting and other cards, invitations, announcements, security certificates, maps, etc.; and in making woodcuts for use in printing illustrations, posters, etc. Engraving for purposes other than printing is classified in Industry 3467.	7.7	92	80
2793	Photoengraving ----- Establishments primarily engaged in preparing photoengraved plates (halftones and line-cuts). These establishments do not, as a rule, print from the plates which they make, but prepare them for use by others.	16.7	96	95
2794	Electrotyping and stereotyping ----- Establishments primarily engaged in preparing electrotypes and stereotype plates. These establishments do not, as a rule, print from the plates they make, but prepare them for use by others.	7.2	92	86

MAJOR GROUP 28—CHEMICALS AND ALLIED PRODUCTS

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
	<p>The Major Group as a Whole</p> <p>This major group includes establishments producing basic chemicals, and establishments manufacturing products by predominantly chemical processes. Establishments classified in this major group manufacture three classes of products: (1) basic chemicals such as acids, alkalies, salts, and organic chemicals; (2) chemical products to be used in further manufacture such as synthetic fibers, plastics materials, crude animal and vegetable oils, dry colors, and pigments; and (3) finished chemical products to be used for ultimate consumption such as drugs, cosmetics, and soaps; or to be used as materials or supplies in other industries such as paints, fertilizers, and explosives. The mining of natural rock salt is classified in mining industries. Establishments primarily engaged in manufacturing nonferrous metals and high percentage ferro-alloys are classified in Major Group 33, silicon carbide in Industry 3291, baking powder, other leavening compounds, and starches in Major Group 20, and embalming fluids and artists' colors in Major Group 39. Establishments primarily engaged in packaging, repackaging, and bottling of purchased chemical products are classified in trade industries.</p>			

See footnotes at end of table.

MAJOR GROUP 28—CHEMICALS AND ALLIED PRODUCTS—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
281	INDUSTRIAL INORGANIC CHEMICALS			
2812	Alkalies and chlorine. Establishments primarily engaged in manufacturing sodium hydroxide (caustic soda), potassium hydroxide (caustic potash), potassium and sodium carbonates, sodium bicarbonate, sal soda, soda ash, and chlorine. Establishments primarily engaged in manufacturing ammonium compounds are classified in Industry 2819.	19.9	81	85
2819	Inorganic chemicals, n.e.c. (Includes SIC Industry 2811, Sulphuric acid; and 2819, Industrial inorganic chemicals, not elsewhere classified) Establishments primarily engaged in manufacturing industrial inorganic chemicals, not elsewhere classified. Important products of this industry include inorganic acids such as boric, hydrochloric, hydrofluoric, nitric, phosphoric and sulfuric; inorganic salts of sodium, potassium, aluminum, calcium, chromium, magnesium, mercury, nickel, silver, and tin; inorganic compounds such as alums, calcium carbide, sodium silicate, ammonium compounds, and anhydrous ammonia; fertilizer materials such as muriate and sulfate of potash; and elemental bromine and iodine. Establishments primarily engaged in manufacturing alkalies and chlorine are classified in Industry 2812, inorganic paint pigments in Industry 2852, and medicinal grades of inorganic chemicals in Industry 2833.	45.5	87	80
282	INDUSTRIAL ORGANIC CHEMICALS			
2821	Cyclic (coal-tar) crudes. Establishments primarily engaged in manufacturing crudes from coal-tar. Such crudes include (1) light oils and light-oil products such as benzene and toluene; (2) coal-tar acids such as cresols and cresylic acid; and (3) products of medium and heavy oil such as creosote oil, naphthalene, anthracene, and their higher homologues, and tar. Establishments primarily engaged in manufacturing coal-tar crudes in byproduct coke ovens are classified in Industry 2932, and petroleum refineries which produce such products in Industry 2911.	2.0	85	78
2823	Plastics materials. Establishments primarily engaged in manufacturing plastics materials in the form of sheets, rods, tubes, granules, powders, or liquids for use in further manufacturing. Important products of this industry include: (1) condensation plastics such as alkyd, phenolic, and urea resins; (2) polymerization plastics, except fibers, such as polyvinyl alcohol, ester, halide, and copolymer resins; polyhexamethylenediamine adipamide resins; (3) protein plastics such as casein, soybean, and coffee-bean; (4) cellulose plastics, regenerated cellulose sheets, and vulcanized fiber; (5) carbohydrate plastics; and (6) synthetic elastomers and other similar products. Establishments primarily engaged in manufacturing rayon and other synthetic fibers are classified in Industry 2825, synthetic rubber in Industry 2824, artificial leather in Industry 2295, and sensitized photographic film in Industry 3861.	29.3	91	81
2824	Synthetic rubber. Establishments primarily engaged in manufacturing synthetic rubber by polymerization or copolymerization. Important products of this industry include GR-S, GR-N, Butyl, Neoprene, Thiokol, and all other vulcanizable elastomers. (An elastomer for the purpose of this classification is a rubber-like material which will stretch 150 percent or more and return with force to approximately its original shape and position). Establishments primarily engaged in manufacturing nonvulcanizable elastomer materials are classified in Industry 2823.	7.7	96	89
2825	Synthetic fibers. Establishments primarily engaged in manufacturing rayon, nylon, and other synthetic fibers, except glass, to be used as materials for further manufacturing. Important products of this industry include fibers of cellulose acetate, regenerated cellulose, polyvinyl ester, polyvinylidene chloride, vinyl chloride, polymeric amide, and protein. Textile mills primarily engaged in throwing, spinning, and weaving rayon, nylon, or other synthetic fibers, including glass fibers, are classified in Major Group 22.	71.9	97	97
2826	Explosives. Establishments primarily engaged in manufacturing explosives such as sporting powder, blasting powder, high explosives, nitrated carbohydrates, safety fuses, and blasting and detonating caps. Establishments primarily engaged in manufacturing ammunition for small arms are classified in Industry 1961, ammunition except for small arms in Group 192, and fireworks in Industry 3985.	10.4	87	99

See footnotes at end of table.

MAJOR GROUP 28—CHEMICALS AND ALLIED PRODUCTS—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
282	INDUSTRY INORGANIC CHEMICALS—Continued			
2829	<p>Organic chemicals, n.e.c. (<i>Includes SIC Industry 2822, Intermediates, dyes, color lakes, and toners; and 2829, Industrial inorganic chemicals, not elsewhere classified</i>)-----</p> <p>Establishments primarily engaged in manufacturing industrial organic chemicals, not elsewhere classified. Important products of this industry include: (1) intermediates, dyes, color lakes, and toners; (2) noncyclic organic chemicals such as acetic, chloroacetic, adipic, formic, oxalic and tartaric acids and their metallic salts; chloral, formaldehyde, and methylamine; (3) solvents such as amyl, butyl, and ethyl alcohols; methanol; ethylene glycol, amyl, butyl, and ethyl acetates; ethyl ether, ethylene glycol ether, and diethylene glycol ether; acetone, carbon disulfide, and carbon tetrachloride; (4) synthetic perfume and flavoring materials such as coumarin, methyl salicylate, saccharin, citral, citronellal, synthetic geraniol, ionone, terpineol, and synthetic vanillin; (5) rubber chemicals such as accelerators and anti-oxidants; (6) plasticizers such as synthetic camphor, phthalates and tricresyl and triphenyl phosphates; (7) synthetic tanning materials; and (8) chemical-warfare gases. Establishments primarily engaged in manufacturing cyclic crudes are classified in Industry 2821, plastics materials and nonvulcanizable elastomers in Industry 2823, synthetic rubber in Industry 2824, organic medicinal chemicals in Group 283, soap and glycerin in Industry 2841, essential oils in Industry 2892, and wood distillation products, naval stores and natural dyeing and tanning materials in Group 286. Distilleries engaged in manufacturing grain alcohol for beverage purposes are classified in Industry 2085.</p>	85.0	81	86
283	DRUGS AND MEDICINES			
2831	<p>Biological products-----</p> <p>Establishments primarily engaged in the production of viruses, serums, toxins, and analogous products such as allergenic extracts, and normal serums and plasmas for human or veterinary use. Establishments primarily engaged in manufacturing bacteriological media are also included in this industry.</p>	3.2	85	57
2832	<p>Botanical products-----</p> <p>Establishments primarily engaged in grading, grinding, and milling botanical drugs and herbs. Establishments primarily engaged in manufacturing agar-agar are also included in this industry.</p>	.7	73	96
2833	<p>Medicinal chemicals (<i>Inorganic and organic medicinal chemicals</i>)-----</p> <p>Establishments primarily engaged in manufacturing bulk organic and inorganic medicinal chemicals and their derivatives. Establishments primarily engaged in manufacturing endocrine products, manufacturing or isolating basic vitamins, and isolating active medicinal principles such as alkaloids from botanical drugs and herbs are also included in this industry.</p>	12.4	73	73
2834	<p>Pharmaceutical preparations-----</p> <p>Establishments primarily engaged in fabricating drugs and medicines in pharmaceutical preparations such as ampules, tablets, capsules, ointments, solutions, and suspensions, for human and veterinary use, including vitamin preparations and Galenicals such as fluid extracts and tinctures. Products of this industry consist of two important lines: (a) pharmaceutical preparations promoted primarily to the dental, medical, or veterinary professions, and (b) pharmaceutical preparations promoted primarily to the public.</p>	65.6	91	96
284	SOAP AND RELATED PRODUCTS			
2841	<p>Soap and glycerin-----</p> <p>Establishments primarily engaged in manufacturing soap in any form (including shampoos and shaving creams) and in manufacturing crude and refined glycerin. Establishments primarily engaged in manufacturing washing powders and compounds and not engaged in manufacturing soap (soap converters) are classified in Industry 2842, and shampoos and shaving creams from purchased soap in Industry 2893.</p>	27.7	82	92
2842	<p>Cleaning and polishing preparations-----</p> <p>Establishments primarily engaged in manufacturing cleansers, washing powders and washing compounds and which are not engaged in manufacturing soap. Establishments primarily engaged in manufacturing cleaning preparations containing soap or other detergents; metal, automobile, stove, shoe and other polishes; paint and varnish removers; waxes, stains, finishes and dressings for fabricated leather and other materials; burnishing inks, and related products are also included in this industry.</p>	15.4	85	62
2843	<p>Sulfonated oils and assistants-----</p> <p>Establishments primarily engaged in producing sulfonated oils and fats and related products such as soluble oils and greases and other soluble assistants, mordants other than tannic acids, and finishes. Tannic acids and synthetic tanning materials are included in Industry 2829; sodium and potassium bichromate, in Industry 2819; and natural dyeing materials, natural tanning materials and chrome mixtures, in Industry 2865.</p>	2.0	77	76

See footnotes at end of table.

MAJOR GROUP 28—CHEMICALS AND ALLIED PRODUCTS—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
285	PAINTS AND ALLIED PRODUCTS			
2851	Paints and varnishes (<i>Paints, varnishes, lacquers, japans, and enamels</i>)----- Establishments primarily engaged in manufacturing paints (in paste form or mixed ready to use), varnishes, lacquers, japans, enamels, and shellac. Important products of this industry include water paints and calcimines (dry and paste); paints in paste form (white or red lead in oil, zinc oxide in oil, colors in oil or japans); ready mixed and semipaste paints (paints in oil, undercoatings, primers, wall paints, stains, and bituminous paints); varnishes, and varnish stains; clear and pigmented lacquers; enamels, japans, and shellac. Establishments primarily engaged in manufacturing plastics materials are classified in Industry 2823, and artists' oil and water colors in Industry 3954.	53.4	94	96
2852	Inorganic color pigments ----- Establishments primarily engaged in manufacturing dry colors and inorganic color pigments. Important products of this industry include black pigments such as black iron oxide, white pigments such as white lead and blanc fixé, and titanium pigments such as ultramarine and vermillion; and chrome, iron, and other dry colors. Establishments primarily engaged in manufacturing organic color pigments (toners or full-strength colors, reduced toners, and lakes) are classified in Industry 2829; bone black, carbon black, and lamp black in Industry 2895; and artists' oil and water colors in Industry 3954.	13.1	87	83
2853	Whiting and fillers ----- Establishments primarily engaged in manufacturing whiting from limestone or chalk; whiting ground in oil (putty); and wood fillers and allied paint products.	1.3	81	53
286	GUM AND WOOD CHEMICALS			
2861	Hardwood distillation ----- Establishments primarily engaged in the destructive distillation of hardwood resulting in the production of charcoal and pyroligneous acid or raw liquor. Such establishments may be engaged in further distillation and washing processes resulting in the production of tars, oils, acids, and alcohols, such as hardwood pitch, wood creosote, natural acetic acid, wood oils, calcium acetate, ethyl acetate, methanol, and methyl acetone.	1.9	94	95
2862	Softwood distillation ----- Establishments primarily engaged in softwood distillation, resulting in the production of wood naval stores either by the steam-and-solvent process or by the destructive distillation process. Important products of this industry include wood turpentine, wood rosin, pine oil, pitch, tar, tar oils, charcoal, and wood creosote. This industry also includes establishments primarily engaged in manufacturing charcoal from softwood and sawdust in charcoal kilns, and which do not recover the distillation products. Establishments primarily engaged in manufacturing turpentine and rosin by distillation of pine gum are classified in Industry 2863. Pulp mills producing sulfate wood naval stores (sulfate wood turpentine and tall oil) as by-products of the production of pulp by the sulfate process are classified in Industry 2611.	4.6	83	99
863	Gum naval stores, steam distilled (<i>Part of SIC Industry 2863, Gum naval stores [excludes fire-distilled gum naval stores]</i>)----- Establishments primarily engaged in manufacturing turpentine and rosin by the steam distillation of pine gum. Establishments primarily engaged in manufacturing turpentine and rosin by wood distillation are classified in Industry 2862, and the gathering of pine gum in the forestry industries. Establishments primarily engaged in manufacturing gum naval stores by fire distillation are excluded from the scope of this census.	.6	98	99
865	Natural tanning and dyeing materials (<i>Includes SIC Industry 2864, Natural dyeing materials; and 2865, Natural tanning materials</i>)----- Establishments primarily engaged in manufacturing solid and liquid tanning extracts from wood, bark, and other vegetable materials, as well as establishments primarily engaged in manufacturing natural dyeing materials from wood, bark, and other vegetable and animal materials. Establishments primarily engaged in manufacturing synthetic dyeing materials or synthetic tanning materials are classified in Industry 2829, chromium compounds in Industry 2819, and leather assistants and finishes in Industry 2843.	1.4	86	78
287	FERTILIZERS			
2871	Fertilizers (<i>Fertilizers, manufacturing and mixing</i>)----- Establishments primarily engaged in manufacturing mixed fertilizers (mixtures containing nitrogen, phosphoric acid [P ₂ O ₅] or potash), from one or more fertilizer materials produced in the same establishment. Sulfuric acid plants operated in conjunction with fertilizer plants and separately reported are classified in Industry 2819. Where separate reports are not available, the sulfuric acid plants are classified in this industry. Establishments primarily engaged in manufacturing fertilizer materials such as muriate and sulfate of potash, but which are not engaged in manufacturing mixed fertilizers are classified in Industry 2819.	20.4	92	60

See footnotes at end of table.

MAJOR GROUP 28—CHEMICALS AND ALLIED PRODUCTS—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
287	FERTILIZERS—Continued			
2872	Fertilizers, mixing only Establishments primarily engaged in mixing fertilizers from purchased fertilizer materials.	11.6	91	47
288	VEGETABLE AND ANIMAL OILS			
2881	Cottonseed oil mills Establishments primarily engaged in manufacturing cottonseed oil, and byproduct cake, meal, and linters. Establishments primarily engaged in refining cottonseed oil into edible cooking oils are classified in Industry 2092.	14.4	90	90
2882	Linseed oil mills Establishments primarily engaged in manufacturing linseed oil and byproduct cake and meal. Establishments primarily engaged in refining linseed oil into edible cooking oils are classified in Industry 2092.	1.6	77	87
2883	Soybean oil mills Establishments primarily engaged in manufacturing soybean oil, and byproduct cake and meal. Establishments primarily engaged in refining soybean oil into edible cooking oils are classified in Industry 2092.	6.5	96	80
2884	Vegetable oil mills, n.e.c. Establishments primarily engaged in manufacturing vegetable oils such as tung oil, castor oil, palm kernel oil, peanut oil, coconut oil and other vegetable oils, not elsewhere classified, and byproduct cake and meal. Establishments primarily engaged in refining vegetable oils into edible cooking oils are classified in Industry 2092, and those refining these oils for medicinal purposes in Industry 2833.	5.0	80	63
2885	Marine animal oils Establishments primarily engaged in manufacturing fish oil and other marine animal oils, and byproduct meal. Establishments primarily engaged in refining these oils for medicinal purposes are classified in Industry 2833.	1.9	98	73
2886	Grease and tallow Establishments primarily engaged in rendering inedible grease and tallow from animal fat, bones and meat scraps. Wet or dry rendered tankage, edible tallow, and bone meal are also included in this industry. Establishments primarily engaged in manufacturing lard and other edible animal fats are classified in Major Group 20.	12.5	90	50
2887	Fatty acids Establishments primarily engaged in manufacturing fatty acids such as stearic and oleic acid.	1.3	86	76
2889	Animal oils, n.e.c. Establishments primarily engaged in manufacturing animal oils, not elsewhere classified.	.2	83	16
289	MISCELLANEOUS CHEMICAL PRODUCTS			
2891	Printing ink Establishments primarily engaged in manufacturing printing ink, gold and bronze inks, and lithographic ink. Establishments primarily engaged in manufacturing writing and stamp pad inks are classified in Industry 2899.	6.0	92	98
2892	Essential oils Establishments primarily engaged in distilling, expressing, and refining natural essential oils. Establishments primarily engaged in manufacturing synthetic perfume and flavoring materials are classified in Industry 2829, and in blending and in compounding perfume bases and concretes in Industry 2893.	1.2	71	92
2893	Toilet preparations (Perfumes, cosmetics, and other toilet preparations) Establishments primarily engaged in manufacturing perfumes, cosmetics, and other toilet preparations such as toilet water, face powder, rouge, lipstick, personal deodorants, washes, and lotions; hair dyes, tonics, dressings and shampoos; bath salts, manicure preparations, tooth paste, and tooth powder. This industry also includes establishments primarily engaged in blending and compounding perfume bases. Establishments primarily engaged in manufacturing synthetic perfume and flavoring materials are classified in Industry 2829, and soap, including shaving creams and soaps, in Industry 2841.	26.0	85	74
2894	Glue and gelatin Establishments primarily engaged in manufacturing (1) glue from vegetable or animal materials and (2) edible, technical, photographic, or pharmaceutical gelatins from animal materials. Establishments primarily engaged in manufacturing dessert preparations with gelatin base are classified in Industry 2099, vegetable gelatin or agar-agar in Industry 2832, and household adhesives, cements, and mucilage in Industry 2899.	5.4	79	77

See footnotes at end of table.

CENSUS OF MANUFACTURES: 1947

MAJOR GROUP 28—CHEMICALS AND ALLIED PRODUCTS—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
289	MISCELLANEOUS CHEMICAL PRODUCTS—Continued			
2895	Carbon black (<i>Bone black, carbon black, and lamp black</i>)----- Establishments primarily engaged in manufacturing bone black, carbon black (channel and furnace black), and lamp black.	3.2	100	97
2896	Compressed and liquefied gases ----- Establishments primarily engaged in manufacturing gases for sale in compressed, liquid, and solid form, such as acetylene, carbon dioxide (dry ice), helium, nitrous oxide, refrigerant gases (except ammonia), and oxygen. Establishments primarily engaged in manufacturing ammonia, chlorine, and sulfur dioxide are classified in Group 281. Natural gasoline plants engaged in the production of gases in compressed and liquefied form are classified in mining industries, and petroleum refineries in Industry 2911.	9.0	100	84
2897	Insecticides and fungicides ----- Establishments primarily engaged in manufacturing inorganic insecticides of copper sulfate, calcium and lead arsenates, and calcium and sodium arsenite; lime-sulfur, sulfur-dust, Paris green; organic insecticides such as rotenone, pyrethrum, and nicotine-bearing insecticides; and miscellaneous insecticides such as organic thiocyanates, DDT, xanthone, and similar products; and fungicides such as copper, sulfur, and mercury-containing fungicides. Establishments primarily engaged in manufacturing household insecticides are classified in Industry 2899; and inorganic chemicals such as white arsenic, calcium and lead arsenate, or sodium fluoride in Industry 2819.	4.6	80	73
2898	Salt ----- Establishments primarily engaged in manufacturing edible salt from rock salt and from natural or artificial brines. Establishments primarily engaged in salt mining are classified in the mining industries.	4.8	100	98
2899	Chemical products, n.e.c. (<i>Chemicals and chemical products, not elsewhere classified</i>)----- Establishments primarily engaged in manufacturing miscellaneous chemical products, not elsewhere classified, such as bluing, laundry soaps, mucilage, writing and stamp pad inks and dextrine sizes; agricultural, industrial and household disinfectants and deodorants; household insecticides and repellents such as fly sprays, rat, ant, and roach poisons and moth repellents; household adhesives and cements; and industrial compounds, such as boiler and insulating compounds, metal, oil, and water-treating compounds, water-proofing compounds, and chemical supplies for foundries.	22.2	82	69

MAJOR GROUP 29—PETROLEUM AND COAL PRODUCTS

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
	The Major Group as a Whole			
	This major group includes establishments refining crude petroleum and manufacturing coke and coke-oven products, paving and roofing materials, and other products made from petroleum and coal. Establishments manufacturing gas (except coke-oven gas) and distributing gas to consumers are classified in public utility industries.			
291	PETROLEUM REFINING			
2911	Petroleum refining ----- Establishments primarily engaged in producing gasoline, fuel oils, lubricants, illuminating oils, and other products from crude petroleum and its fractionation products in petroleum refineries. Establishments primarily engaged in re-refining or reclaiming used oils (crankcase drainings) by a distillation process are also included in this industry. Establishments primarily engaged in producing natural gasoline from natural gas are classified in mining industries, and in manufacturing lubricating oils and greases by blending and compounding purchased materials in Industry 2992.	145.8	99	98

See footnotes at end of table.

MAJOR GROUP 29—PETROLEUM AND COAL PRODUCTS—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
293	COKE AND BYPRODUCTS			
2931	Beehive coke ovens ----- Establishments primarily engaged in producing coke in beehive ovens.	3.1	100	9
2932	Byproduct coke ovens ----- Establishments primarily engaged in manufacturing coke, coal gas, tar, and other products in "byproduct" coke ovens.	35.8	100	93
295	PAVING AND ROOFING MATERIALS			
2951	Paving mixtures and blocks ----- Establishments primarily engaged in manufacturing asphalt and tar paving mixtures and manufacturing paving blocks made of asphalt, creosoted wood, and various compositions of asphalt or tar with other materials. Establishments primarily engaged in manufacturing brick, concrete, granite, and stone paving blocks are classified in Major Group 32.	2.7	99	88
2952	Roofing felts and coatings ----- Establishments primarily engaged in manufacturing asphalt and other saturated roofing felts in roll or shingle form, either smooth or faced with grit, and in manufacturing roofing cements and coatings. Establishments primarily engaged in manufacturing paints are classified in Industry 2851.	16.6	95	96
299	MISCELLANEOUS PETROLEUM AND COAL PRODUCTS			
2991	Fuel briquets and packaged fuel ----- Establishments primarily engaged in manufacturing fuel briquets, boulets, and packaged fuel from anthracite culm, bituminous slack, charcoal, coke screenings, sawdust or other materials, usually mixed with tar or other binders; and in manufacturing powdered fuel.	1.2	100	100
2992	Lubricants, n.e.c. (Lubricating oils and greases not made in petroleum refineries) ----- Establishments primarily engaged in blending and compounding lubricating oils and greases from purchased materials. Petroleum refineries engaged in the production of lubricating oils and greases are classified in Industry 2911.	6.3	90	18
2999	Petroleum and coal products, n.e.c. ----- Establishments primarily engaged in producing petroleum and coal products, not elsewhere classified, such as calcined petroleum coke and compounded or blended wax.	.5	99	100

MAJOR GROUP 30—RUBBER PRODUCTS

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
	The Major Group as a Whole			
	This major group includes establishments manufacturing from natural or synthetic rubber, gutta percha, balata, or gutta siak, all kinds of rubber products such as tires, rubber footwear, mechanical rubber goods, and rubber sundries. This group also includes establishments manufacturing reclaimed rubber or rebuilt and retreaded rubber tires. Automobile tire repair shops engaged in the recapping and the retreading of automobile tires are classified in service industries. The manufacture of elastic webbing is classified in Major Group 22, products made of elastic webbing and garments made from rubberized fabrics in Major Group 23, and synthetic rubber in Industry 2824.			
301	TIRES AND INNER TUBES			
3011	Tires and inner tubes ----- Establishments primarily engaged in manufacturing pneumatic casings, inner tubes, and solid and cushion tires for all types of vehicles. Establishments primarily manufacturing solid and cushion tires and tiring of less than 2 inches, including those for lawn mowers, tricycles, baby carriages, wheelchairs, etc., are classified in Industry 3099.	115.7	90	95

See footnotes at end of tables.

CENSUS OF MANUFACTURES: 1947

MAJOR GROUP 30—RUBBER PRODUCTS—Continued

Industr. group and industry code	TITLE AND DESCRIPTION	All employees —average for 1947 (thousands)	1947 shipments of pri- mary products by this in- dustry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
302	RUBBER FOOTWEAR			
3021	Rubber footwear Establishments primarily engaged in manufacturing all-rubber footwear, waterproof fabric-upper footwear and other fabric-upper footwear having rubber soles. Establishments primarily engaged in manufacturing rubber, composition, and fiber heels, soles and soling strips and related shoemaking and repairing materials are classified in Industry 3099.	28.1	80	99
303	RECLAIMED RUBBER			
3031	Reclaimed rubber Establishments primarily engaged in reclaiming rubber from used tires, scrap, and miscellaneous waste rubber by manufacturing processes which result in a product that is sold for mixing with crude rubber or rubberlike material as an extender. Establishments primarily engaged in the assembly and wholesale sale of scrap rubber, but not engaged in manufacturing reclaimed rubber, are classified in trade industries.	2.1	95	44
309	RUBBER INDUSTRIES, NOT ELSEWHERE CLASSIFIED			
3099	Rubber industries, n.e.c. Establishments primarily engaged in the manufacturing of industrial and mechanical rubber goods, rubberized fabrics, and vulcanized rubber clothing and miscellaneous rubber specialties and sundries. Establishments primarily engaged in rebuilding and retreading tires for the trade or for wholesale sale are included in this industry but the rebuilding or retreading by tire-repair shops is classified in service industries. Establishments primarily manufacturing rubber garments and garments made from rubber sheeting and from rubberized fabrics produced in the same establishments are classified in this industry, whereas those manufacturing such garments from purchased rubber sheeting and rubberized fabrics are classified in Industry 2385. Establishments primarily engaged in making rubber shoe findings (heels, soles, soling slabs, and top lifts) are included in this industry; those primarily making plastic shoe findings, in Industry 3131. Establishments primarily engaged in manufacturing rubber gaskets are classified in Industry 3293, and rubber girdles in Industry 2342.	113.2	85	81

MAJOR GROUP 31—LEATHER AND LEATHER PRODUCTS

Industry group and industry code	TITLE AND DESCRIPTION	All employees —average for 1947 (thousands)	1947 shipments of pri- mary products by this in- dustry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
	The Major Group as a Whole This major group includes establishments engaged in tanning, currying, and finishing hides and skins, and establishments manufacturing finished leather and artificial leather products and some similar products made of other materials. Jobbers, who do no manufacturing but who assign hides and skins to contractors for tanning and finishing, are included in Industry 3111.			
311	LEATHER TANNING AND FINISHING			
3111	Leather tanning and finishing Establishments primarily engaged in tanning, currying, and finishing sole and belting leathers, upper and lining leathers and miscellaneous specialty leathers, and in embossing, japanning, and currying leather. Two types of establishments operate in this industry; namely, the "regular" tannery which tans, curries, and finishes hides or skins for its own account, and the "contract" factory which tans, curries, and finishes hides or skins owned by others. Jobbers who do no manufacturing but who assign hides and skins to contractors for tanning and finishing are also included in this industry.	53.2	100	100

See footnotes at end of table.

MAJOR GROUP 31—LEATHER AND LEATHER PRODUCTS—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
312	INDUSTRIAL LEATHER BELTING			
3121	Industrial leather belting (<i>Industrial leather belting and packing</i>)----- Establishments primarily engaged in manufacturing leather belting used for transmission of power, and leather packing.	5.0	91	98
313	FOOTWEAR CUT STOCK			
3131	Footwear cut stock (<i>Boot and shoe cut stock and findings</i>)----- Establishments primarily engaged in manufacturing leather soles, inner soles, and other shoe cut stock, and leather welting, shanks, heel and toe caps, leather shoe laces, finished wood heels, and other boot and shoe findings. Establishments primarily engaged in manufacturing heels, soling strips and soles made of rubber, composition, and fiber are classified in Industry 3099.	22.1	99	97
314	FOOTWEAR (EXCEPT RUBBER)			
3141	Footwear, except rubber (<i>Footwear, except house slippers and rubber footwear</i>)----- Establishments primarily engaged in manufacturing boots, shoes, sandals, moccasins, and allied footwear, and leggings, overgaiters, etc., made chiefly of leather, but to some extent of canvas and other textiles. Establishments primarily engaged in manufacturing house slippers are classified in Industry 3142, and rubber footwear and rubber-soled canvas footwear in Industry 3021.	229.3	99	100
3142	House slippers----- Establishments primarily engaged in manufacturing house slippers of leather or other materials.	11.0	94	85
315	LEATHER GLOVES AND MITTENS			
3151	Leather dress gloves (<i>Dress and semidress leather gloves</i>)----- Establishments primarily engaged in manufacturing dress and semidress gloves exclusively of leather. Establishments primarily engaged in manufacturing leather work gloves and mittens are classified in Industry 3152; sporting and athletic gloves in Industry 3949; and dress and semidress gloves and mittens of cloth, or cloth and leather combined in Industry 2381.	9.0	94	95
3152	Leather work gloves (<i>Leather work gloves and mittens</i>)----- Establishments primarily engaged in manufacturing leather work gloves and mittens. Establishments primarily engaged in manufacturing dress and semidress leather gloves are classified in Industry 3151; sporting and athletic leather gloves in Industry 3949; and work gloves and mittens of cloth or cloth and leather combined in Industry 2382.	2.6	82	79
316	LUGGAGE			
3161	Luggage (<i>Suitcases, briefcases, bags, trunks, and other luggage</i>)----- Establishments primarily engaged in manufacturing suitcases, briefcases, bags, trunks, and related luggage of leather or other materials.	16.1	94	97
317	HANDBAGS AND SMALL LEATHER GOODS			
3171	Handbags and purses (<i>Women's handbags and purses</i>)----- Establishments primarily engaged in manufacturing women's handbags and purses of leather or other materials.	20.3	99	97
3172	Small leather goods----- Establishments primarily engaged in manufacturing small leather articles such as bill-folds; card, cigarette, and key cases; coin purses; and checkbook covers.	5.6	90	90
319	MISCELLANEOUS LEATHER GOODS			
3192	Saddlery, harness, and whips----- Establishments primarily engaged in manufacturing saddles and parts, harness and parts, halters, horse boots, feed bags, whips and crops, whipstocks, and whip handles. Establishments primarily producing saddlery, harness, etc., to individual order on a custom basis are classified in nonmanufacturing industries.	2.9	86	92
3199	Leather goods, n.e.c.----- Establishments primarily engaged in manufacturing miscellaneous leather goods, not elsewhere classified, including embossed leather goods, leather desk sets, dog collars and other dog furnishings, leather handles for luggage, novelties, razor strops, and safety belts.	6.2	90	80

See footnotes at end of table.

CENSUS OF MANUFACTURES: 1947

MAJOR GROUP 32—STONE, CLAY, AND GLASS PRODUCTS

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
	The Major Group as a Whole			
	This major group includes establishments engaged in manufacturing flat glass and other glass products, cement, structural clay products, pottery, concrete and gypsum products, cut-stone products, abrasive and asbestos products, etc., principally from stone, clay, and sand. This major group excludes mines and quarries except common clay pits operated in conjunction with structural-clay products establishments. Also excluded are establishments manufacturing cut-stone products in conjunction with the operation of quarries.			
321	FLAT GLASS			
3211	Flat glass Establishments primarily engaged in manufacturing flat glass, including plate glass, clear window glass, rolled glass, figured and wire glass, opalescent and obscured glass, spectacle glass, and cathedral and skylight glass. The industry also produces laminated glass, but establishments primarily engaged in manufacturing laminated glass from purchased flat glass are classified in Industry 3231.	27.2	97	81
322	PRESSED AND BLOWN GLASSWARE			
3221	Glass containers Establishments primarily engaged in manufacturing glass containers for commercial packing and bottling, and for home canning.	47.1	(^d)	(^d)
3229	Pressed and blown glassware, n.e.c. (Pressed and blown glass and glassware, not elsewhere classified) Establishments primarily engaged in manufacturing pressed and blown glass and glassware, not elsewhere classified. Important products of this industry include machine-made or hand-made glass tableware; glass blanks for electric light bulbs, light shades and reflectors, and other lighting glassware; glass tubing and other technical, scientific, and industrial pressed and blown glassware; glass cooking and oven ware; glass brick; and glass insulators. Establishments primarily engaged in the production of pressed lenses for headlights, beacons, and lanterns are also included in this industry, but establishments primarily engaged in the production [grinding] of optical lenses are classified in Industry 3831. Establishments primarily engaged in manufacturing glass containers are classified in Industry 3221, and complete electric light bulbs in Industry 3651.	42.2	96	90
323	PRODUCTS OF PURCHASED GLASS			
3231	Products of purchased glass (Glass products made of purchased glass) Establishments primarily engaged in manufacturing glass products from purchased glass, including laminated or safety glass, stained, leaded, ornamented, and decorated glass; mirrors; cutware; scientific-apparatus glass; glass novelties; mosaic glass; ground glass; cut, beveled, and etched glass; and glass watch crystals. Establishments primarily engaged in manufacturing optical and ophthalmic lenses are classified in Major Group 38.	22.4	97	78
324	CEMENT, HYDRAULIC			
3241	Cement, hydraulic Establishments primarily engaged in manufacturing hydraulic cement, including portland, natural, masonry, and puzzolan cements.	35.7	100	100
325	STRUCTURAL CLAY PRODUCTS			
3251	Brick and hollow tile Establishments primarily engaged in manufacturing clay building brick, vitrified paving brick, and hollow structural tile. Establishments primarily engaged in manufacturing fire brick are classified in Industry 3255, sand-lime brick in Industry 3296, and glass brick in Industry 3229.	29.6	95	97
3253	Floor and wall tile (Floor and wall tile, except quarry tile) Establishments primarily engaged in manufacturing ceramic tile, mosaic tile, glazed and enameled tile including faience and other types of ceramic floor and wall tile (except quarry tile—Industry 3259). Establishments primarily engaged in manufacturing hollow structural tile are classified in Industry 3251, and drain tile in Industry 3259.	6.8	97	95
3254	Sewer pipe Establishments primarily engaged in manufacturing sewer pipe and kindred products made of clay. Concrete sewer pipe is classified in Industry 3271 and cast-iron sewer pipe in Industry 3321.	9.1	83	92

See footnotes at end of table.

MAJOR GROUP 32—STONE, CLAY, AND GLASS PRODUCTS—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
325	STRUCTURAL CLAY PRODUCTS—Continued			
3255	Clay refractories ----- Establishments primarily engaged in manufacturing fire brick, crucibles, and other heat-resisting clay products such as glass-house tank blocks, stoppers, floaters, and rings. Establishments primarily engaged in manufacturing nonclay refractories are classified in Industry 3297.	18.0	96	94
3259	Structural clay products, n.e.c. ----- Establishments primarily engaged in manufacturing structural clay products, not elsewhere classified, such as architectural terra cotta, roofing tile, stove lining, flue lining, chimney pipes and tops, wall coping, segment blocks, drain tile, and quarry or promenade tile.	5.7	83	70
326	POTTERY AND RELATED PRODUCTS			
3261	Vitreous plumbing fixtures (<i>Vitreous and semivitreous plumbing fixtures</i>)----- Establishments primarily engaged in manufacturing vitreous and semivitreous pottery plumbing fixtures and accessories. Important products of this industry include bathroom and toilet fixtures, closet bowls, flush tanks, lavatories and stalls, and accessories. Establishments primarily engaged in manufacturing enameled-iron plumbing fixtures are classified in Industry 3431.	7.8	98	99
3262	Vitreous-china food utensils (<i>Vitreous-china table and kitchen articles</i>)----- Establishments primarily engaged in manufacturing vitreous-china table and kitchen articles for use in households and in hotels, restaurants, and other commercial institutions for preparing, serving, or storing food or drink. Establishments primarily engaged in manufacturing fine (semivitreous) types of earthenware (whiteware) table and kitchen articles are classified in Industry 3263.	11.1	97	97
3263	Earthenware food utensils (<i>Fine earthenware [whiteware] table and kitchen articles</i>)----- Establishments primarily engaged in manufacturing fine (semivitreous) types of earthenware table and kitchen articles for preparing, serving, or storing food or drink. Establishments primarily engaged in manufacturing vitreous-china table and kitchen articles are classified in Industry 3262.	16.7	92	97
3264	Porcelain electrical supplies ----- Establishments primarily engaged in manufacturing porcelain electrical insulators, molded porcelain parts for electrical devices, spark-plug and steatitic porcelain, and other electrical supplies from clay and other ceramic materials.	11.5	89	93
3265	China decorating for the trade ----- Establishments primarily engaged in firing and decorating white china and earthenware for the trade. Establishments primarily engaged in firing and decorating china to individual order are classified in service industries.	1.0	100	98
3269	Pottery products, n.e.c. ----- Establishments primarily engaged in manufacturing art and decorative pottery, industrial and laboratory ware, and miscellaneous crockery, earthenware, stoneware, and other pottery products, not elsewhere classified. Important products of this industry include china, earthenware, and stoneware figures; vases, lamp bases, and garden pottery; chemical porcelain; industrial or laboratory ware; grinding media; forms for dipped rubber goods; filtering media; earthenware flower pots; and pyrometric cones and tubes. Stoneware table and kitchen articles are also included in this industry.	9.7	95	83
327	CONCRETE AND PLASTER PRODUCTS			
3271	Concrete products ----- Establishments primarily engaged in manufacturing concrete building blocks and shapes, pipe and conduit, and similar products such as poles, piling, septic tanks, garbage boxes, garden furniture, incinerators, and vaults made from a combination of stone or gravel, sand, and cement. Contractors engaged in concrete construction work are classified in the construction industries, and building-materials dealers engaged in mixing and delivering ready-mixed concrete in the trade industries.	46.8	99	100
3272	Gypsum products ----- Establishments primarily engaged in manufacturing plaster, plaster board, and other products composed wholly or chiefly of gypsum.	7.5	97	98
3274	Lime ----- Establishments primarily engaged in manufacturing quicklime, hydrated lime, and dead-burned dolomite from limestone, dolomite, shells, and other substances.	7.0	93	97

See footnotes at end of table.

MAJOR GROUP 32—STONE, CLAY, AND GLASS PRODUCTS—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
327	CONCRETE AND PLASTER PRODUCTS—Continued			
3275	Mineral wool Establishments primarily engaged in manufacturing mineral wool and mineral-wool insulation products made of such materials as rock, slag, and silica. Establishments primarily engaged in producing vermiculite products are classified in Industry 3299.	8.9	(d)	(d)
328	CUT-STONE AND STONE PRODUCTS			
3281	Cut-stone and stone products (<i>Part of SIC Industry 3281, Cut-stone and stone products [from purchased stone only]</i>) Establishments primarily engaged in cutting, shaping, and finishing marble, granite, limestone, and other stone for building and miscellaneous uses from purchased stone. Establishments manufacturing cut-stone products in conjunction with the operation of quarries are excluded from this industry. Important products of this industry include monuments and tombstones, dimension stones for buildings, slate blackboards, and stone furniture. Establishments primarily engaged in buying or selling partly finished monuments and tombstones, but performing no work on the stones other than lettering or finishing to custom order, are classified in trade industries. The quarrying of dimension stone and the operation of dimension-stone dressing plants in conjunction with such quarries are classified in the mining industries. Also, the cutting of grindstones, pulpstones, and whetstones at the quarry is classified in mining industries.	9.9	100	98
329	MISCELLANEOUS NONMETALLIC MINERAL PRODUCTS			
3291	Abrasive products Establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials; abrasive sticks, stones, bricks, paper, and cloth; abrasive grains, natural or manufactured; and buffing and polishing wheels. The cutting of grindstones, pulpstones, and whetstones at the quarry is classified in the mining industries.	20.8	93	86
3292	Asbestos products Establishments primarily engaged in manufacturing asbestos textiles, asbestos building materials (except asbestos paper—Industry 2613), and other commodities composed wholly or chiefly of asbestos, except steam and other packing, pipe and boiler covering, and gaskets (Industry 3293).	21.5	87	91
3293	Gaskets and asbestos insulations (<i>Steam and other packing, and pipe and boiler covering</i>) Establishments primarily engaged in manufacturing packing for steam, water, and other pipe joints, and for engines, air compressors, etc.; asbestos insulating materials for covering boilers and pipes; and gaskets. This industry includes gaskets made of all materials, but excludes rubber, leather, and metal packings.	13.0	83	78
3294	Graphite: ground or blended (<i>Natural graphite: ground, refined, or blended</i>) Establishments primarily engaged in grinding, refining, or blending natural graphite (plumbago).	.9	73	93
3295	Minerals: ground or treated (<i>Minerals and earths: ground or otherwise treated</i>) Establishments primarily engaged in grinding, pulverizing, or otherwise treating certain earths, rocks, or minerals, such as barytes, borax, chalk, clays, Cornwall stone, feldspar, kaolin, mica, pumice, quartz, silica, and talc. Establishments primarily engaged in crushing or grinding purchased slag are also included in this industry.	8.0	96	91
3296	Sand-lime products (<i>Sand-lime brick, block, and tile</i>) Establishments primarily engaged in manufacturing sand-lime brick, block, and tile.	.3	94	71
3297	Nonclay refractories Establishments primarily engaged in manufacturing refractories and crucibles made of materials other than clay. Establishments primarily engaged in manufacturing clay refractories and crucibles are classified in Industry 3255.	10.3	94	91
3298	Statuary and art goods (<i>Statuary and art goods—factory production</i>) Establishments primarily engaged in the factory production of statuary and art goods made of plaster of paris and papier-maché. Important products of this industry include such articles as statuary, small images, and architectural sculptures; ornamental plaster work such as mantels, columns, panels, moldings, brackets, vases, urns, and pedestals; and scagliola and papier-maché articles.	2.0	91	97
3299	Nonmetallic mineral products, n.e.c. (<i>New industry classification, not provided for in the Standard Industrial Classification</i>) Establishments primarily engaged in manufacturing nonmetallic mineral products, not elsewhere classified. Principal products of the industry are sheet mica products, except radio parts; exfoliated vermiculite; stucco; and magnesite floor composition.	3.6	90	85

See footnotes at end of table.

MAJOR GROUP 33—PRIMARY METAL INDUSTRIES

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipment of these products by all industries
	The Major Group as a Whole This major group includes establishments engaged in the smelting and refining of ferrous and nonferrous metals from ore, pig, or scrap; in the rolling, drawing, and alloying of ferrous and nonferrous metals; and in the manufacture of castings, forgings, and other basic products of ferrous and nonferrous metals.			
331	BLAST FURNACES AND STEEL MILLS			
3311	Blast furnaces. Establishments primarily engaged in manufacturing pig iron and blast furnace ferro-alloys from iron ore and scrap. Establishments primarily engaged in manufacturing ferro and nonferrous additive alloys by electrometallurgical processes are classified in Industry 3313.	36.9	100	100
3312	Steel works and rolling mills. Establishments primarily engaged in converting pig iron, scrap iron, and scrap steel into steel, and in hot-rolling iron and steel into basic shapes such as plates, sheets, strips, rods, bars, and tubing. In many such establishments, the manufacturing processes are carried beyond the hot-rolling stage.	500.8	(²)	(²)
3313	Electrometallurgical products. Establishments primarily engaged in manufacturing ferro and nonferrous additive alloys by electrometallurgical processes, including high-percentage ferro-alloys such as ferromanganese, ferrochromium, ferrovanadium, and ferrotitanium, and high-percentage nonferrous additive alloys. Establishments primarily engaged in manufacturing blast-furnace ferro-alloys are classified in Industry 3311.	9.6	188	95
332	IRON AND STEEL FOUNDRIES			
3321	Gray-iron foundries. Establishments primarily engaged in manufacturing gray-iron castings, including cast gray-iron pipe and fittings.	173.8	92	87
3322	Malleable-iron foundries. Establishments primarily engaged in manufacturing malleable-iron castings.	29.9	88	91
3323	Steel foundries. Establishments primarily engaged in manufacturing steel castings. Establishments which produce heat and corrosion resistant castings as well as those making carbon and low alloy steel castings are included in this industry.	63.7	88	83
333	PRIMARY NONFERROUS METALS			
3331	Primary copper (Primary smelting and refining of copper). Establishments primarily engaged in smelting copper from the ore, and in refining copper by electrolytic or other processes. Important products of this industry include copper blocks, slabs, pigs, ingots, or refinery bars. Establishments primarily engaged in rolling and drawing copper are classified in Industry 3351.	14.6	(²)	(²)
3332	Primary lead (Primary smelting and refining of lead). Establishments primarily engaged in smelting lead from ore, and in refining lead by any process. Important products of this industry include lead blocks, slabs, pigs, or ingots. Establishments primarily engaged in rolling and drawing lead are classified in Industry 3359.	4.7	(²)	(²)
3333	Primary zinc (Primary smelting and refining of zinc). Establishments primarily engaged in smelting zinc from the ore, and in refining zinc by any process. Important products of this industry include zinc blocks, slabs, spelter, pigs, or ingots. Establishments primarily engaged in rolling and drawing zinc are classified in Industry 3359.	12.4	89	100
3334	Primary aluminum (Primary refining of aluminum). Establishments primarily engaged in producing aluminum from the ore or from alumina, and in refining aluminum by any process. Important products of this industry include aluminum blocks, slabs, pigs, or ingots. Establishments primarily engaged in rolling and drawing aluminum are classified in Industry 3352.	8.9	172	100
3339	Primary nonferrous metals, n.e.c. (Includes SIC Industry 3335, Primary refining of magnesium; and 3339, Primary smelting and refining of nonferrous metals, not elsewhere classified). Establishments primarily engaged in smelting and refining nonferrous metals, not elsewhere classified, including magnesium, gold, silver, platinum, iridium, cobalt, nickel, tin, and antimony. Establishments primarily engaged in rolling and drawing these nonferrous primary metals are classified in Industry 3359, and the production of bullion at the site of the mine is classified in the mining industries.	2.2	96	16

See footnotes at end of table.

MAJOR GROUP 33—PRIMARY METAL INDUSTRIES—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
334	SECONDARY NONFERROUS METALS			
3341	Secondary nonferrous metals (Includes SIC Industry 3341, Secondary smelting and refining of nonferrous metals and alloys; and establishments engaged in alloying primary nonferrous metals from SIC Industry Group 335)----- Establishments primarily engaged in recovering nonferrous metals and alloys from new and used scrap and dross, but which are not engaged in further fabrication. This industry includes establishments engaged in the alloying of nonferrous primary metals. Plants engaged in the recovery of tin through secondary smelting and refining are classified in this industry, but those primarily engaged in detinning cans by chemical processes without the production of tin are classified in Industry 2819. Establishments primarily engaged in assembling, sorting, and breaking up scrap metal, without smelting and refining are classified in trade industries.	18.4	98	90
335	NONFERROUS METAL ROLLING AND DRAWING			
3351	Copper rolling and drawing (Part of SIC Industry 3351, Rolling, drawing, and alloying of copper [excludes establishments primarily engaged in alloying primary copper])----- Establishments primarily engaged in rolling, drawing, and extruding copper, brass, bronze, and other copper-base alloy basic shapes such as plates, sheets, strips, rods, and tubing. Establishments primarily engaged in drawing wire from purchased copper and copper-base alloy rods are classified in Industry 3392, and in manufacturing insulated wire from purchased copper wire in Industry 3631.	53.9	95	92
3352	Aluminum rolling and drawing (Part of SIC Industry 3352, Rolling, drawing, and alloying of aluminum [excludes establishments primarily engaged in alloying primary aluminum])----- Establishments primarily engaged in rolling, drawing, and extruding aluminum and aluminum-base alloy basic shapes such as plates, sheets, rods, wire, and tubing. Establishments primarily engaged in drawing wire from purchased aluminum and aluminum-base alloy rods are classified in Industry 3392.	27.4	^(d)	^e 96
3359	Nonferrous metal rolling, n.e.c. (Part of SIC Industry 3359, Rolling, drawing, and alloying of nonferrous metals, not elsewhere classified [excludes establishments primarily engaged in alloying primary nonferrous metals, except copper and aluminum])----- Establishments primarily engaged in rolling and drawing nonferrous metals other than copper (Industry 3351) and aluminum (Industry 3352). The products of this industry are produced in the form of basic shapes such as sheets, strips, bars, rods, wire, and tubing. Establishments primarily engaged in manufacturing gold, silver, tin and other foils in Industry 3497, and in drawing wire from purchased nonferrous rods in Industry 3392.	7.6	80	94
336	NONFERROUS FOUNDRIES			
3361	Nonferrous foundries ----- Establishments primarily engaged in manufacturing castings and die castings of aluminum, brass, bronze, and other nonferrous metals and alloys.	65.3	94	91
339	MISCELLANEOUS PRIMARY METAL INDUSTRIES			
3391	Iron and steel forgings ----- Establishments primarily engaged in manufacturing light and heavy-board drop, steam hammer, upset and press forgings with or without the use of dies. Rolling mills engaged in the production of iron and steel forgings are classified in Industry 3312.	36.7	95	77
3392	Wire drawing ----- Establishments primarily engaged in drawing wire from purchased iron, steel, or nonferrous metal rods or bars, and which may be engaged in the further manufacture of products made from wire. Rolling mills engaged in the production of ferrous wire are classified in Industry 3312, and establishments primarily engaged in rolling and drawing nonferrous metals in Group 335. Establishments primarily engaged in manufacturing insulated wire and cable from purchased wire are classified in Industry 3631, and other wire products from purchased wire in Group 348.	55.1	96	37
3393	Welded and heavy-riveted pipe ----- Establishments primarily engaged in manufacturing welded pipe and tubes, and lock-joint and heavy-riveted pipe from purchased skelp. Rolling mills engaged in manufacturing welded and heavy-riveted pipe are classified in Industry 3312.	13.1	95	25
3399	Primary metal industries, n.e.c. ----- Establishments primarily engaged in manufacturing flat, bright, cold-rolled strip (including razor-blade strip), cold-rolled sheets, cold-finished steel bars, nonferrous forgings, ferrous and nonferrous flakes and powders, and other primary metal products, not elsewhere classified. Establishments primarily engaged in annealing and heat-treating steel for the trade are also included in this industry.	22.1	94	26

See footnotes at end of table.

MAJOR GROUP 34—FABRICATED METAL PRODUCTS

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
	<p>The Major Group as a Whole</p> <p>This major group includes establishments engaged in fabricating ferrous and non-ferrous metal products such as tin cans and other tinware, hand tools, cutlery, general hardware, nonelectric heating apparatus, fabricated structural metal products, metal stampings, lighting fixtures, fabricated wire products, and a variety of metal products, not elsewhere classified. Establishments primarily engaged in manufacturing small machine parts by powder metallurgy (Standard Industrial Classification Industry 3464) are classified according to principal products made rather than by process of manufacture. Certain important segments of the metal fabricating industries are classified in other major groups such as machinery in Major Groups 35 and 36, transportation equipment in Major Group 37, professional, scientific, and controlling instruments, watches and clocks in Major Group 38, and jewelry and silverware in Major Group 39. The production of ferrous and nonferrous metals and their alloys, and basic products made of metal, are classified in Major Group 33. Heating, plumbing, air-conditioning, refrigeration, and roofing contractors incidentally manufacturing boiler shop or sheet metal products are classified in nonmanufacturing industries.</p>			
341	TIN CANS AND OTHER TINWARE			
3411	<p>Tin cans and other tinware-----</p> <p>Establishments primarily engaged in manufacturing packers' cans, beer cans, general-line cans, oil containers, milk and ice-cream cans, and other tinware (except household and hospital utensils—Industry 3463) from purchased tinplate, terneplate, blackplate, or enameled sheet metal.</p>	46.9	96	99
342	CUTLERY, HAND TOOLS, AND HARDWARE			
3421	<p>Cutlery (Part of SIC Industry 3421. Cutlery [excludes hair clippers and electric shavers])-----</p> <p>Establishments primarily engaged in manufacturing cutlery, such as table cutlery (except sterling-silver and silver-plated cutlery—Industry 3914); scissors, razors, safety-razor blades, manicure implements, pocket knives, butcher knives, and cleavers. This industry also includes hedge and other trimmers, and tinners and other snips. Establishments primarily engaged in manufacturing animal hair clippers are classified in Industry 3522, other hair clippers in Industry 3991, and electric dry shavers in Industry 3621.</p>	20.2	93	94
3422	<p>Edge tools-----</p> <p>Establishments primarily engaged in manufacturing all kinds of edge tools, such as scythes, axes, planes, chisels, drawknives; and cutting dies for use in cutting cloth, paper, and leather. Establishments primarily engaged in manufacturing metal-cutting dies are classified in Industry 3543.</p>	8.8	80	77
3423	<p>Hand tools, n.e.c. (Hand tools, except edge tools, machine tools, files, and saws)-----</p> <p>Establishments primarily engaged in manufacturing hand tools, such as hammers, wrenches, pliers, screw drivers, shovels, rakes, and a variety of special tools used by repairmen, jewelers, stone-cutters, and ironworkers. Establishments primarily engaged in manufacturing edge tools are classified in Industry 3422, files in Industry 3424, saws in Industry 3425, and power-driven hand tools in Major Group 35.</p>	35.7	81	85
3424	<p>Files-----</p> <p>Establishments primarily engaged in manufacturing and recutting files and rasps.</p>	4.4	94	93
3425	<p>Hand saws and saw blades-----</p> <p>Establishments primarily engaged in manufacturing hand saws and saw blades for hand and power-driven saws. Establishments primarily engaged in manufacturing power-driven sawing machines are classified in Major Group 35.</p>	8.4	78	87
3429	<p>Hardware, n.e.c.-----</p> <p>Establishments primarily engaged in manufacturing miscellaneous metal products usually termed "hardware" and not elsewhere classified. Important products of this industry include door locks, lock sets, and other builders' hardware; motor-vehicle and other transportation equipment hardware; hardware for caskets, furniture, cabinets, saddlery, harness, trunks, and suitcases; locks and padlocks; vacuum bottles and jugs. Establishments primarily engaged in manufacturing bolts and nuts are classified in Industry 3494, nails and spikes in Industry 3481, cutlery in Industry 3421, and hand tools in Industry 3423.</p>	76.5	90	91
343	HEATING AND PLUMBING EQUIPMENT			
3431	<p>Metal plumbing fixtures and fittings (Enameled-iron and metal sanitary and other plumbers' supplies)-----</p> <p>Establishments primarily engaged in manufacturing enameled-iron, cast-iron, or pressed-metal sanitary ware such as bathtubs, sinks, lavatories, and laundry tubs; and plumbers' brass goods and fittings such as faucets, spigots, and steam and water traps. These establishments may also manufacture small plumbers' valves, stopcocks, and nozzles, but establishments specializing in the manufacture of steam or waterline valves are classified in Industry 3591. Establishments primarily engaged in manufacturing vitreous and semivitreous-pottery sanitary ware are classified in Industry 3261, and vitreous-enameled kitchen, household, and hospital ware in Industry 3461.</p>	34.1	87	89

See footnotes at end of table.

MAJOR GROUP 34—FABRICATED METAL PRODUCTS—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
343	HEATING AND PLUMBING EQUIPMENT—Continued			
3432	Oil burners (<i>Oil burners, domestic and industrial</i>)----- Establishments primarily engaged in manufacturing distillate or fuel oil burners used for installation in heating and cooking equipment, for industrial-process equipment, and for generating steam for power. Establishments primarily engaged in manufacturing complete boiler-burner units and furnace-burner units are classified in Industry 3439.	6.3	80	64
3439	Heating and cooking apparatus, n.e.c. (<i>Heating and cooking apparatus, except electric, not elsewhere classified</i>)----- Establishments primarily engaged in manufacturing heating and cooking equipment, not elsewhere classified. Important products of this industry include stoves, ranges, water heaters, warm-air furnaces, domestic steam and hot-water heating apparatus, cast-iron and nonferrous radiators, complete gas and oil boiler-burner units, furnace-burner units, boiler-stoker units, incinerators, unit heaters, gas burners, portable ovens, steam tables, and cafeteria food warming equipment. Establishments primarily engaged in manufacturing electric stoves and ranges are classified in Industry 3621, incubators and brooders in Industry 3522, and industrial furnaces and ovens in Industry 3567. Boiler shops primarily engaged in the production of industrial, power, and marine boilers, smoke stacks, heavy tanks, and other plate work are classified in Industry 3443.	110.5	84	87
344	STRUCTURAL METAL PRODUCTS			
3441	Structural and ornamental products (<i>Fabricated structural steel and ornamental metal work</i>)----- Establishments primarily engaged in manufacturing fabricated iron and steel or other metal for structural purposes, and architectural ornamental work of ferrous and nonferrous metals. Important products of this industry include structural steel shapes, stairs and staircases, fire escapes, grilles, railings, fences and posts, and portable metal buildings. Establishments primarily engaged in manufacturing metal doors, sash, frames, moldings, and trim are classified in Industry 3442, and fabrication work done by construction contractors at the site of construction is classified in construction industries.	79.7	86	88
3442	Metal doors, sash, and trim (<i>Metal doors, sash, frames, molding, and trim</i>)----- Establishments primarily engaged in manufacturing ferrous and nonferrous and metal-covered doors and sash, window and door frames, store fronts, molding, and trim.	21.1	83	86
3443	Boiler shop products ----- Establishments primarily engaged in manufacturing industrial, power, and marine boilers, smoke stacks, heavy tanks, and other boiler shop products; and fabricated plate work, which involves the cutting, punching, bending, and shaping of steel plates for other industries, or for assembly on the job. Establishments primarily engaged in manufacturing domestic heating and cooking apparatus are classified in Industry 3439, and light tanks from sheet metal in Industry 3444.	69.0	81	81
3444	Sheet-metal work ----- Establishments primarily engaged in manufacturing cornices, ventilators, skylights, gutters, and other types of sheet-metal work for buildings (not including fabrication work done by construction contractors at the place of construction), and manufacturing sheet-metal stovepipes, light tanks, bins, furnace casings, etc. Establishments primarily engaged in manufacturing heavy tanks from plate are classified in Industry 3443; domestic heating apparatus such as expansion tanks, range boilers, hot-water storage tanks, and tanks for water heaters in Industry 3439. Heating, refrigeration, air-conditioning and roofing contractors incidentally producing sheet-metal products are classified in non-manufacturing industries.	42.6	86	52
346	METAL STAMPING AND COATING			
3461	Vitreous-enameled products ----- Establishments primarily engaged in manufacturing vitreous-enameled kitchen, household, and hospital utensils; table tops; refrigerator, stove and washing-machine parts, etc. Establishments primarily engaged in manufacturing enameled-iron plumbing fixtures are classified in Industry 3431.	12.2	82	71
3463	Metal stampings (<i>Includes SIC Industry 3462, Automobile stampings; and 3463, stamped and pressed metal products, except automobile stampings</i>)----- Establishments primarily engaged in manufacturing metal stampings of ferrous or nonferrous metal such as bottle caps and tops; stamped kitchen, household, and hospital utensils; perforated metal; stamped and pressed machine parts; and automobile stampings such as fenders, tops, hub caps, body parts, and trim. Establishments primarily engaged in stamping and spinning metal for the trade are also included in this industry; but establishments primarily engaged in manufacturing stamped vitreous-enameled products are classified in Industry 3461, and establishments primarily engaged in assembling complete automobile bodies are classified in Group 371.	132.0	86	82

See footnotes at end of table.

MAJOR GROUP 34—FABRICATED METAL PRODUCTS—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
346	METAL STAMPING AND COATING—Continued			
3465	Enameling and lacquering (<i>Enameling, japanning, and lacquering</i>)----- Establishments primarily engaged in enameling, japanning, and lacquering metal products for the trade.	4.0	(³)	(³)
3466	Galvanizing (<i>Galvanizing and other hot-dip coating</i>)----- Establishments primarily engaged in galvanizing iron and steel sheets or formed products; in coating iron sheets or formed products with aluminum, lead, or zinc; and in retinning cans and utensils. Most of the work done in this industry is done on materials owned by others. Rolling mills engaged in galvanizing, tinning, and other coating are classified in Industry 3312.	3.1	(³)	(³)
3467	Engraving on metal ----- Establishments primarily engaged in engraving, chasing, and etching jewelry, silverware, notarial seals, and other metal products for the trade, for purposes other than printing. Establishments primarily engaged in preparing metal lithographic plates are classified in Industry 2761; engraving and etching steel and copper plates for use in printing in Industry 2792; and preparing photoengraved plates (halftones and linecuts) in Industry 2793.	3.4	(³)	(³)
3468	Plating and polishing (<i>Electroplating, plating, and polishing</i>)----- Establishments primarily engaged in all types of electroplating, plating, and metal-polishing work. Most of the work done in this industry is done on materials owned by others.	28.2	(³)	(³)
347	LIGHTING FIXTURES			
3471	Lighting fixtures ----- Establishments primarily engaged in manufacturing lighting fixtures and equipment of any type, including electric and gas lighting fixtures, carbide, kerosene, and gasoline lamps, and metal reflectors and fittings. Establishments primarily engaged in producing glassware for lighting fixtures are classified in Major Group 32, and electric light bulbs, tubes, and related light sources in Industry 3651.	47.6	90	90
348	FABRICATED WIRE PRODUCTS			
3481	Nails and spikes ----- Establishments primarily engaged in manufacturing wire and cut nails, brads, spikes, staples, and tacks from purchased rods, wire, and plate. Establishments primarily engaged in drawing wire from purchased rods and in manufacturing nails, brads, spikes, and staples are classified in Industry 3392, and rolling mills manufacturing similar products in Industry 3312.	3.8	79	19
3489	Wirework, n.e.c. ----- Establishments primarily engaged in manufacturing from purchased wire, ferrous and nonferrous wire products, not elsewhere classified. Important products of this industry include fencing, fly screening, cloth and netting, bare wire rope and cable, barbed wire, tire chains, bale ties, concrete reinforcing wire and mesh, springs, coated welding wire, wire guards and partitions, wire grilles, trays and baskets and kitchen wire goods. Establishments primarily engaged in manufacturing insulated wire from purchased wire are classified in Industry 3631, and establishments engaged in drawing wire from purchased rods and in manufacturing wire products are classified in Industry 3392.	56.8	91	60
349	MISCELLANEOUS FABRICATED METAL PRODUCTS			
3491	Metal barrels, drums, and pails (<i>Metal shipping barrels, drums, kegs, and pails</i>)----- Establishments primarily engaged in manufacturing ferrous and nonferrous shipping barrels, drums, kegs, and pails.	10.9	83	83
3492	Safes and vaults ----- Establishments primarily engaged in manufacturing safes and vaults (except concrete grave vaults—Industry 3271), vault doors and linings, safe-deposit boxes and chests and safe locks.	3.8	98	98
3493	Steel springs ----- Establishments primarily engaged in manufacturing leaf springs, hot-wound springs, and coiled flat springs. Establishments primarily engaged in manufacturing wire springs classified in Industry 3489, and rolling mills manufacturing steel springs in Industry 3312.	7.8	90	69
3494	Bolts, nuts, washers, and rivets ----- Establishments primarily engaged in manufacturing bolts, nuts, washers, rivets, turn-buckles, screws, and toggle bolts. Rolling mills engaged in manufacturing similar products are classified in Industry 3312. Establishments primarily engaged in manufacturing screw-machine products are classified in Industry 3495.	49.2	92	86

See footnotes at end of table.

MAJOR GROUP 34—FABRICATED METAL PRODUCTS—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
349	MISCELLANEOUS FABRICATED METAL PRODUCTS—Continued			
3495	Screw-machine products Establishments primarily engaged in manufacturing automatic or hand screw-machine products from rod, bar, or tube stock of metal, fiber, plastic, or other material. The products of this industry consist of a wide variety of unassembled parts and are usually manufactured on a job or order basis. This industry does not include establishments primarily engaged in making standard size and type nuts, bolts, rivets, and screws, on screw-machines; these establishments, together with those making nuts, bolts, etc., on headers, threaders, and nut-forming machines, are included in Industry 3494.	28.5	93	86
3496	Collapsible tubes Establishments primarily engaged in manufacturing collapsible tubes, made of aluminum, tin, plastic, and other materials, for use as containers for toilet preparations, adhesives, etc.	3.9	91	100
3497	Metal foil (Gold, silver, tin, aluminum, and other foil) Establishments primarily engaged in manufacturing gold, silver, tin, aluminum, and other foil and leaf.	4.3	97	88
3499	Fabricated metal products, n.e.c. Establishments primarily engaged in manufacturing metal products, not elsewhere classified, including metal novelties and specialties. Other products included in the industry are frogs, switches, crossings, and similar railway track accessories; aluminum giftware; metal bookends; and aluminum ladders.	7.6	90	59

MAJOR GROUP 35—MACHINERY (EXCEPT ELECTRICAL)

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
	The Major Group as a Whole This major group includes establishments engaged in manufacturing machinery and prime movers other than electrical equipment (Major Group 36). Machines powered by built-in or detachable electric motors ordinarily are included in this major group with the exception of certain types of small electrical household appliances (Major Group 36). Portable tools, both electric and pneumatic powered, are included in this major group, but hand tools are classified in Major Group 34.			
351	ENGINES AND TURBINES			
3511	Steam engines and turbines (Includes SIC Industry 3511, Steam engines, turbines and water wheels; and turbo-generators powered by steam and water power from 3614, Motors, generators, and motor-generator sets) Establishments primarily engaged in manufacturing steam engines, steam turbines, water wheels, and water turbines, turbo-generators and water-wheel generator sets. Establishments primarily engaged in building or rebuilding locomotives are classified in Industry 3741.	21.6	82	77
3519	Internal-combustion engines (Diesel and semi-Diesel engines; and other internal-combustion engines, not elsewhere classified) Establishments primarily engaged in manufacturing Diesel or semi-Diesel engines, and other internal-combustion engines, not elsewhere classified, for stationary, marine, traction, or other uses. Establishments primarily engaged in manufacturing aircraft engines are classified in Industry 3722, and automobile engines in Industry 3717.	71.4	74	79
352	TRACTORS AND FARM MACHINERY			
3521	Tractors Establishments primarily engaged in manufacturing wheel-type and track-laying tractors, and garden tractors. Establishments primarily engaged in manufacturing industrial trucks, tractors, and trailers used for handling materials in industrial plants, depots, and docks are classified in Industry 3565.	77.3	83	94

MAJOR GROUP 35—MACHINERY (EXCEPT ELECTRICAL)—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
352	TRACTORS AND FARM MACHINERY—Continued			
3522	Farm machinery, except tractors (<i>Agricultural machinery, except tractors</i>)—Establishments primarily engaged in manufacturing agricultural machinery and equipment (except tractors, Industry 3521) for use in the preparation or maintenance of the soil, planting and harvesting of the crop, preparing crops for market, or for use in performing other agricultural operations and processes. Establishments primarily engaged in manufacturing agricultural hand tools are classified in Group 342.	94.1	89	92
353	CONSTRUCTION AND MINING MACHINERY			
3531	Construction and mining machinery (<i>Construction, mining, and similar machinery, except oil-field machinery and tools</i>)—Establishments primarily engaged in manufacturing heavy machinery and equipment used by the construction and mining industries for portable or fixed-plant operation, in dredging, excavating, road and airport construction, ore and rock crushing, screening or washing, ore dressing or concentration. Establishments primarily engaged in manufacturing well-drilling machinery are classified in Industry 3532, and coal and ore conveyors in Industry 3563.	84.7	85	82
3532	Oil-field machinery and tools —Establishments primarily engaged in manufacturing machinery and tools for use in oil and gas fields, or for drilling water wells.	29.2	88	91
354	METALWORKING MACHINERY			
3541	Machine tools —Establishments primarily engaged in manufacturing power-driven machine tools that shape metal by grinding or progressively cutting away chips. Important products of this industry include boring, broaching, drilling, gear-cutting and finishing, grinding, milling, and planing machines; lathes, shapers, and slotters; honing and lapping, polishing and buffing, sawing and cutting-off, contour-sawing and filing, tapping, threading, and rifling machines, and replacement and repair parts for machine tools. The rebuilding of machine tools is included in this industry. Establishments primarily engaged in manufacturing machinery for the shaping, pressing, or forging of metal, where the shaping action of such machines is not dependent upon a cutting tool are classified in Industry 3542, and machine-tool accessories, dies, and machinists' precision tools in Industry 3543.	70.7	77	87
3542	Metalworking machinery, n.e.c. (<i>Includes SIC Industry 3542, Metalworking machinery, except machine tools; and portable electric woodworking tools from 3553, Woodworking machinery</i>)—Establishments primarily engaged in manufacturing machinery for shaping, pressing, forging, or bending metal, where the shaping action of such machines is not dependent upon a cutting tool. Important products of this industry include bending machines; can forming and soldering, and other sheet-metalworking machinery; die-casting machines; forging machines, such as drop hammers (impression die), forging hammers (flat die), forging presses, bulldozers, and upsetters; portable power-driven metalworking and woodworking tools, and flexible-shaft machines; presses (forming, stamping, and punch); riveting machines (not portable); rod and wire-forming and fabricating machines; rolling-mill machinery and equipment; shears; spring-winding and forming machines; acetylene welding and cutting apparatus; wire-drawing machines; and replacement and repair parts. Establishments primarily engaged in manufacturing electric welding apparatus are classified in Industry 3617.	55.0	87	87
3543	Cutting tools, jigs, fixtures, etc. (<i>Machine-tool accessories, other metalworking-machinery accessories, and machinists' precision tools</i>)—Establishments primarily engaged in manufacturing attachments and accessories for machine tools and other metalworking machinery; small power-driven cutting and shaping tools and tool holders; and precision measuring tools. Important products of this industry include: (1) attachments for lathes, boring, drilling, and milling machines and other machine tools; balancing machines; die-casting dies; jigs, fixtures, drop-forging dies, forming and stamping dies and punches, and subpresses; tools for screw and automatic machines; and semifinished products such as die sets, leather pins, dowel pins, and die springs; (2) arbors and collars; broaches; collets or sockets; countersinks; countersink-drill combinations; drills; cutters; reamers; threading tools (taps, dies, and pipe-threading tools) and other cutting tools and tool holders; and (3) precision measuring tools (micrometers and verniers); gauges (plug, ring, snap, and thread); and other measuring tools. Establishments primarily engaged in manufacturing hand tools (except power-driven) are classified in Group 342.	88.9	90	80

See footnotes at end of table.

MAJOR GROUP 35—MACHINERY (EXCEPT ELECTRICAL)—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
355	SPECIAL-INDUSTRY MACHINERY, NOT ELSEWHERE CLASSIFIED			
3551	Food-products machinery Establishments primarily engaged in manufacturing machinery for use by the food-products and beverage manufacturing industries in the preparation, canning, or packaging of food products. Important products of this industry include bakers' machinery and equipment (bake ovens, bread-slicing machines, wrapping machines, and dough mixers); canning machinery; chocolate and confectionery machinery; dairy products machinery and equipment, including fluid milk processing machinery, butter, cheese, and ice cream machinery, condensed and evaporated milk machinery, and related equipment; flour-mill and grain-mill machinery; packing-house machinery; sugar-mill machinery; coffee-roasting and grinding machines, food choppers, grinders, mixers, and slicers; peanut roasters; popcorn machines; and parts and attachments. Establishments primarily engaged in manufacturing refrigeration machinery are classified in Industry 3585.	36.8	89	82
3552	Textile machinery Establishments primarily engaged in manufacturing machinery for the textile industries. Important products of this industry include: (1) fiber-to-fabric machinery, such as picker, carding, combing, garnetting, and spinning machines, doubling and twisting frames, winders, and beaming, warping, and slashing machines; (2) fabric machinery, such as knitting and braiding machines, looms for weaving, and Jacquard, lace, net embroidery, cordage, and rope machines; (3) machinery for bleaching, dyeing, printing, mercerizing, finishing, and drying stock, yarn, and cloth; and (4) extra parts, attachments, and accessories, not elsewhere classified. Establishments engaged in manufacturing domestic or industrial sewing machines are classified in Industry 3583.	53.6	95	96
3553	Woodworking machinery (<i>Part of SIC Industry 3553, Woodworking machinery [excludes portable electric woodworking tools]</i>) Establishments primarily engaged in manufacturing machinery for sawmills, planing mills, cabinet and furniture makers, pattern makers, and veneer workers; and small woodworking machinery for home, shop, and professional craftsmen. Establishments primarily engaged in manufacturing hand tools such as planes, axes, drawknives, and hand saws are classified in Group 342, and portable electric woodworking tools in Industry 3542.	15.6	79	74
3554	Paper-industries machinery Establishments primarily engaged in manufacturing machinery for the pulp, paper, and paper-product industries. Establishments primarily engaged in manufacturing printing-trades machinery are classified in Industry 3555.	17.1	85	89
3555	Printing-trades machinery (<i>Printing-trades machinery and equipment</i>) Establishments primarily engaged in manufacturing machinery and equipment used by the printing and bookbinding trades. Important products of this industry include bookbinding and photoengraving machinery; printers' machinery such as presses, typesetting, typefoundry, electrotyping, and stereotyping machines; engravers' equipment (metal plates, wood blocks, and lithographic stones); printers' rollers, rules, sticks, blocks, and type cases; and type, leads, and slugs. Establishments primarily engaged in manufacturing textile-printing machinery are classified in Industry 3552.	24.8	95	96
3559	Special-industry machinery, n.e.c. (<i>Includes SIC Industry 3559, Special-industry machinery, not elsewhere classified; and industrial patterns and molds from 3998, Models and patterns, except paper patterns</i>) Establishments primarily engaged in manufacturing special-industry machinery, not elsewhere classified, such as smelting and refining equipment, cement-making, clay-working, cotton-ginning, glass-making, hat-making, incandescent lamp-making, leather-working, paint-making, rubber-working, tobacco-working, cigar and cigarette-making, shoe-making, and stone-working machinery. Establishments primarily engaged in manufacturing industrial patterns and molds for use in foundries, glass-making plants, plastic-working plants, etc., are classified in this industry.	68.1	82	79
356	GENERAL INDUSTRIAL MACHINERY			
3561	Pumps and compressors (<i>Pumps, air and gas compressors, and pumping equipment</i>) Establishments primarily engaged in manufacturing pumps, compressors, and pumping equipment for general industrial use. Important products of this industry include hand and power-driven pumps, pumps for fluid power systems, air compressors, gas compressors (except ice-making, refrigerating, and air-conditioning units—Industry 3585), and spraying and dusting units for paints and chemicals. Establishments primarily engaged in manufacturing measuring-and-dispensing pumps for gasoline service station use are classified in Industry 3586.	54.7	80	81

See footnotes at end of table.

MAJOR GROUP 35—MACHINERY (EXCEPT ELECTRICAL)—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
356	GENERAL INDUSTRIAL MACHINERY—Continued			
3562	Elevators and escalators ----- Establishments primarily engaged in manufacturing passenger or freight elevators, automobile lifts, dumb-waiters, and escalators. Establishments primarily engaged in manufacturing commercial conveyor systems and equipment are classified in Industry 3563.	10.2	92	91
3563	Conveyors (Conveyors and conveying equipment) ----- Establishments primarily engaged in manufacturing conveyors and conveying equipment for installation in factories, warehouses, mines, and other industrial and commercial establishments. Establishments primarily engaged in manufacturing passenger or freight elevators, dumb-waiters, and escalators are classified in Industry 3562.	24.6	78	80
3564	Blowers and fans (Blowers, exhaust and ventilating fans) ----- Establishments primarily engaged in manufacturing blowers, and exhaust and ventilating fans for general industrial, commercial, and household use, including attic fans, blower-filter units (furnace blowers), and fans for mechanical draft. Establishments primarily engaged in manufacturing dust collection and related equipment are also included in this industry. Establishments primarily engaged in manufacturing complete air-conditioning units are classified in Industry 3585, and circulating fans for use on desks, pedestals, or wall brackets in Industry 3621.	14.8	75	78
3565	Industrial trucks and tractors (Industrial trucks, tractors, trailers, and stackers) ----- Establishments primarily engaged in manufacturing industrial trucks, tractors, trailers, stackers, and accessories used for handling materials on floors and paved surfaces in and around industrial plants, depots, docks, and terminals. Establishments primarily engaged in manufacturing motor vehicles and motor-vehicle trailers are classified in Group 371, wheel-type and track-laying tractors in Industry 3521, and mining cars in Industry 3531.	14.0	84	84
3566	Power-transmission equipment (Mechanical power-transmission equipment, except ball and roller bearings) ----- Establishments primarily engaged in manufacturing mechanical power-transmission equipment such as chain drives, variable speed drives, speed reducers, gears, clutches (mechanical, hydraulic, or magnetic), shafts, bearings (except ball and roller bearings—Industry 3593), and parts for such equipment. Establishments primarily engaged in manufacturing automobile power-transmission equipment are classified in Industry 3717, and ball and roller bearings in Industry 3593.	54.3	87	86
3567	Industrial furnaces and ovens ----- Establishments primarily engaged in manufacturing electric, coal, gas, oil, and other fuel-fired or steam-heated industrial furnaces and ovens. Establishments primarily engaged in manufacturing electric heating units for furnaces and ovens are classified in Industry 3619.	6.3	86	74
3568	Mechanical stokers (Mechanical stokers, domestic and industrial) ----- Establishments primarily engaged in manufacturing domestic and industrial stokers for anthracite and bituminous coal, either hopper fed, or with a conveyor for direct feed from the bin.	4.1	71	74
3569	General industrial machinery, n.e.c. ----- Establishments primarily engaged in manufacturing machinery and equipment for general industrial use, and for which no special classification is provided. Machine shops primarily engaged in producing machine and equipment parts usually on a job or order basis are classified in Industry 3599, and machine shops engaged exclusively in repair work are classified in repair industries. Important products of this industry are closed types of industrial heat exchangers; hydraulic jacks; steam condensers; packaging and wrap-types of industrial heat exchangers; hydraulic jacks; steam condensers; packaging and wrap-types of industrial heat exchangers; and centrifugals and separators, except cream.	34.3	79	74
357	OFFICE AND STORE MACHINES			
3571	Computing and related machines (Computing machines and cash registers) ----- Establishments primarily engaged in manufacturing adding, calculating, tabulating, and bookkeeping machines; card-punching, sorting, and tabulating machines; and cash registers. Establishments primarily engaged in manufacturing typewriters are classified in Industry 3572, and office duplicating machines and devices in Industry 3579.	46.4	96	93
3572	Typewriters ----- Establishments primarily engaged in manufacturing typewriters and parts, including electric and nonelectric standard typewriters, specialized typewriters, and typewriter principle machines, such as continuous form-handling machines, billing machines without accounting registers, office composing machines, and stencil-cutting typewriters.	26.6	90	97

See footnotes at end of table.

MAJOR GROUP 35—MACHINERY (EXCEPT ELECTRICAL)—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
357	OFFICE AND STORE MACHINES—Continued			
3576	Scales and balances Establishments primarily engaged in manufacturing weighing devices of all types, including those with automatic computing mechanisms and coin-operated scales. Important products of this industry are industrial scales, retail and commercial scales, household and person weighing scales, mailing and parcel post scales, and railroad track and motor truck scales, as well as laboratory precision balances.	6.5	91	92
3579	Office and store machines, n.e.c. (<i>Includes SIC Industry 3575, vending, amusement and other coin-operated machines; and 3579, Office and store machines and devices, not elsewhere classified</i>) Establishments primarily engaged in manufacturing store and office machines and devices, not elsewhere classified, such as mimeograph and other duplicating devices; addressing and mailing machines; check-writing, signing and canceling machines; perforators and other protective devices; automatic merchandising machines; and amusement and other coin-operated machines; dictating machines; time recording and time stamping machines; and autographic registers. Establishments primarily engaged in manufacturing computing machines and cash registers are classified in Industry 3571; typewriters in Industry 3572; photocopy equipment in Industry 3861; coin-operated refrigerated beverage and ice cream dispensers in Industry 3585; coin-operated phonographs in Industry 3661; coin-operated scales and balances in Industry 3576; and coin-operated photographic apparatus in Industry 3861.	18.3	94	90
358	SERVICE AND HOUSEHOLD MACHINES			
3581	Domestic laundry equipment Establishments primarily engaged in manufacturing laundry equipment such as washing machines, wringers, driers, and ironers for household use. Establishments primarily engaged in manufacturing commercial laundry equipment are classified in Industry 3582.	28.4	90	91
3582	Laundry and dry-cleaning machinery (<i>Commercial laundry, dry-cleaning, and pressing machines</i>) Establishments primarily engaged in manufacturing laundry and dry-cleaning equipment and pressing machines for commercial and industrial use. Establishments primarily engaged in manufacturing domestic laundry equipment are classified in Industry 3581.	9.1	94	94
3583	Sewing machines Establishments primarily engaged in manufacturing sewing machines for domestic and industrial use. Establishments primarily engaged in producing parts and attachments for sewing machines (except needles, cases, and cabinets) are also included in this industry.	15.3	95	94
3584	Vacuum cleaners Establishments primarily engaged in manufacturing vacuum cleaners for domestic and industrial use.	14.9	84	88
3585	Refrigeration machinery (<i>Refrigerators, refrigeration machinery, and complete air-conditioning units</i>) Establishments primarily engaged in manufacturing mechanical and absorption refrigerators for commercial, industrial, and household use, refrigeration machinery, ice-making machinery and equipment, refrigerated showcases and cabinets, and complete air-conditioning units for domestic, commercial, and industrial use. Establishments primarily engaged in manufacturing soda fountains and beer-dispensing equipment are classified in Industry 3997. Establishments primarily engaged in manufacturing coin-operated refrigerated beverage dispensing, ice cream dispensing and other types of refrigerated merchandising machines are also included in this industry.	129.3	(2)	(2)
3586	Measuring and dispensing pumps Establishments primarily engaged in manufacturing measuring-and-dispensing pumps commonly used in service and filling stations for dispensing gasoline, oil, and grease, including grease guns. Establishments primarily engaged in manufacturing pumps, compressors, and pumping equipment for general industrial use are classified in Industry 3561.	12.1	76	98

See footnotes at end of table.

MAJOR GROUP 35—MACHINERY (EXCEPT ELECTRICAL)—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
358	SERVICE AND HOUSEHOLD MACHINES—Continued			
3589	Service and household machines, n.e.c. (<i>Service-industry and household machines, not elsewhere classified</i>) Establishments primarily engaged in manufacturing machines and equipment, not elsewhere classified, for household use or for use in service industries. Establishments primarily engaged in manufacturing household and commercial electrical appliances are classified in Industry 3621. Important products of this industry are household and commercial dishwashing machines, water softeners, floor waxing and polishing machines, carpet sweepers, floor scrubbing machines, garbage-disposal units, and automotive service equipment.	11.2	83	82
359	MISCELLANEOUS MACHINERY PARTS			
3591	Valves and fittings, except plumbers' (<i>Valves and fittings, except plumbers' valves</i>) Establishments primarily engaged in manufacturing valves for controlling the flow of liquids or gases in pipes and mains, and for machinery including parts and fittings for such valves. Establishments primarily engaged in manufacturing plumbers' fittings, (faucets, spigots, etc.) are classified in Industry 3431.	80.1	82	90
3592	Fabricated pipe and fittings Establishments primarily engaged in cutting, threading, bending, and otherwise fabricating pipe and pipe fittings from purchased pipe. Establishments primarily engaged in manufacturing cast-iron pipe and fittings are classified in Industry 3321, welded and heavy-riveted pipe in Industry 3393, and seamless steel pipe in Industry 3312.	10.6	82	83
3593	Ball and roller bearings Establishments primarily engaged in manufacturing ball and roller bearings and parts. Establishments primarily engaged in manufacturing bearings, except ball and roller, are classified in Industry 3566.	52.2	94	96
3599	Machine shops (<i>Machine shops, jobbing and repair</i>) Establishments primarily engaged in producing machine and equipment parts, not elsewhere classified, from materials owned by them or performing machining operations on materials owned by others. These establishments usually operate on a job or order basis and are equipped with machine tools and other power-driven metalworking machinery capable of manufacturing a wide range of machine and equipment parts. Machine shops classified in this industry are characterized by their method of operation rather than their product, and the fact that they may be primarily engaged in repair work does not exclude them from this classification; however, machine shops engaged exclusively, or almost exclusively, in repair work are classified in repair industries.	58.2	91	74

MAJOR GROUP 36—ELECTRICAL MACHINERY

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
	The Major Group as a Whole This major group includes establishments engaged in manufacturing machinery, apparatus, and supplies for the generation, storage, transmission, transformation, and utilization of electrical energy. The manufacture of certain types of small electrical household appliances is included in this group, but machinery and equipment as well as other types of electrical appliances, powered by built-in or detachable electric motors are classified in Major Group 35.			

See footnotes at end of table.

MAJOR GROUP 36—ELECTRICAL MACHINERY—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
361	ELECTRICAL INDUSTRIAL APPARATUS			
3611	Wiring devices and supplies ----- Establishments primarily engaged in manufacturing wiring devices (attachment plugs and caps, convenience outlets, lamp sockets and receptacles, and snap switches); wiring supplies (pole-line hardware, conductor connectors, overhead trolley-line material, and rail bonds for both propulsion and signal circuits); electrical insulators and insulation materials, except porcelain insulators (Industry 3265), glass insulators (Industry 3229) and mica insulators (Industry 3299); conduits and fittings; and lightning arresters. Establishments primarily engaged in manufacturing electric lighting fixtures are classified in Industry 3471.	38.4	86	86
3612	Carbon and graphite products (<i>Carbon and graphite products for use in the electrical industry</i>)----- Establishments primarily engaged in manufacturing lighting carbons; carbon, graphite, and metal-graphite brushes and brush stock; carbon or graphite electrodes for thermal and electrolytic uses; and other carbon, graphite, and metal-graphite products.	7.8	95	95
3613	Electrical measuring instruments (<i>Instruments for indicating, measuring, and recording electrical quantities and characteristics</i>)----- Establishments primarily engaged in manufacturing pocket, portable, panelboard, and graphic recording instruments for measuring electricity, such as volt meters, ammeters, watt meters, watthour meters, demand meters, and other meters and indicating instruments. This industry also includes establishments primarily engaged in manufacturing meter transformers, and analyzers for testing the electrical characteristics of internal-combustion engines, radio apparatus, etc.	20.9	84	80
3614	Motors and generators (<i>Includes part of SIC Industry 3614, Motors, generators, and motor-generator sets [excludes turbo-generators powered by steam and water power]; and propulsion-type motors and generators from 3641, Electrical equipment for motor vehicles, aircraft, and railway locomotives and cars</i>)----- Establishments primarily engaged in manufacturing electric motors and generators (other than automotive starting motors and battery charging generators); motor-generator sets; and gasoline and Diesel engine-driven generator sets. Establishments primarily engaged in manufacturing automotive starting motors and battery charging generators are classified in Industry 3641. Establishments primarily engaged in manufacturing electrical equipment for railway locomotives and cars; and motors, generators, and control equipment for gasoline-electric or oil-electric busses and trucks, including storage battery trucks, are classified in this industry. Turbo-generators powered by steam or water power are classified in Industry 3511.	127.0	80	92
3615	Transformers (<i>Power and distribution transformers</i>)----- Establishments primarily engaged in manufacturing power, distribution, and specialty transformers. Establishments primarily engaged in manufacturing radio-frequency or voice-frequency transformers, coils, or chokes are classified in Industry 3661.	36.6	85	91
3616	Electrical control apparatus (<i>Switchgear, switchboard apparatus, and industrial controls</i>)----- Establishments primarily engaged in manufacturing switchgear, switchboard apparatus, and industrial electrical controls. Important products of this industry include power switches, circuit breakers, contactors, and similar switchgear for general industrial application; switchboards and cubicles, control and metering panels; power fuse mountings, and similar switchboard apparatus and supplies; and industrial controls such as motor starters and controllers, electromagnetic brakes, and electronic inspection and gauging apparatus and positioning controls.	72.3	91	89
3617	Electrical welding apparatus ----- Establishments primarily engaged in manufacturing electrical welding apparatus, electrode holders, and other welding apparatus. Establishments primarily engaged in manufacturing gas welding apparatus are classified in Industry 3542.	7.3	93	89
3619	Electrical industrial apparatus, n.e.c. (<i>Includes SIC Industry 3619, Electrical equipment for industrial use, not elsewhere classified; and electric soldering irons from 3621, Electrical appliances</i>)----- Establishments primarily engaged in manufacturing industrial and commercial electrical apparatus and appliances, not elsewhere classified, including electric heating units for furnaces and ovens.	11.0	83	53

See footnotes at end of table.

MAJOR GROUP 36—ELECTRICAL MACHINERY—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
362	ELECTRICAL APPLIANCES			
3621	Electrical appliances (<i>Includes part of SIC Industry 3621, Electrical appliances [excludes electric soldering irons]; and electric shavers from 3421, Cutlery</i>) Establishments primarily engaged in manufacturing household and commercial electrical appliances used for heating, cooking, and other purposes. Important products of this industry are electric ranges, disc stoves, hot plates, cookers, casseroles, roasters, toasters, water heaters, irons, mixers, percolators, dry shavers, and circulating fans. Establishments primarily engaged in manufacturing domestic laundry machines are classified in Industry 3581, commercial laundry, dry-cleaning, and pressing machines in Industry 3582, sewing machines in Industry 3583, vacuum cleaners in Industry 3584, mechanical and absorption refrigerators in Industry 3585, and electric soldering irons in Industry 3619.	44.4	86	72
363	INSULATED WIRE AND CABLE			
3631	Insulated wire and cable Establishments primarily engaged in manufacturing insulated or armored wire and cable from purchased wire. Establishments engaged in drawing wire from purchased rods and bars and which are also engaged in making insulated wire are classified in Industry 3392.	21.3	97	32
364	ENGINE ELECTRICAL EQUIPMENT			
3641	Engine electrical equipment (<i>Part of SIC Industry 3641, Electrical equipment for motor vehicles, aircraft and railway locomotives and cars [excludes propulsion-type motors and generators]</i>) Establishments primarily engaged in manufacturing electrical equipment for internal-combustion engines. Important products of this industry include starting motors and battery-charging generators for automobiles, trucks and busses, aircraft and marine and stationary internal-combustion engines; and spark plugs, magnetos, coils, distributors, and other ignition apparatus for all internal-combustion engines. Electrical equipment for railway locomotives and cars; and motors, generators, and control equipment for gasoline-electric and oil-electric busses and trucks, including storage battery trucks, are included in Industry 3614.	43.9	89	91
365	ELECTRIC LAMPS			
3651	Electric lamps Establishments primarily engaged in manufacturing electric bulbs, tubes, and related light sources. Important products of this industry include incandescent filament lamps, vapor and fluorescent lamps, photoflash and photoflood lamps, and other electric light sources. Establishments primarily engaged in manufacturing electrotherapeutic lamp units for ultra-violet and infra-red radiation are classified in Industry 3693, electric lighting fixtures in Industry 3471, and glass blanks for bulbs in Industry 3229.	23.8	94	100
366	COMMUNICATION EQUIPMENT			
3661	Radios and related products (<i>Radios, radio and television equipment—except radio tubes; radar and related detection apparatus; and phonographs</i>) Establishments primarily engaged in manufacturing radio and television receiving and transmitting equipment, electrical and magnetic field detection apparatus, light and heat-emission detecting apparatus, object detection apparatus (radar), and other apparatus and products associated with radio equipment, including miscellaneous radio parts; phonographs and accessories (except records—Industry 3663); and public-address and music-distribution apparatus. Establishments primarily engaged in manufacturing radio-receiving and transmitting tubes are classified in Industry 3662.	178.6	(2)	(2)
3662	Electronic tubes (<i>Includes SIC Industry 3662, Radio tubes; and nonradio electronic tubes, except X-ray, from 3693, X-ray and therapeutic apparatus and nonradio electronic tubes</i>) Establishments primarily engaged in manufacturing radio receiving and transmitting tubes, and nonradio electronic tubes. Establishments primarily engaged in manufacturing X-ray tubes are classified in Industry 3693.	27.7	94	95
3663	Phonograph records Establishments primarily engaged in manufacturing phonograph records and record blanks.	10.0	96	99
3664	Telephone and telegraph equipment Establishments primarily engaged in manufacturing telephone and telegraph equipment, and parts specifically designed for inclusion in telephone and telegraph circuits. Establishments primarily engaged in manufacturing radio-telephone and radio-telegraph apparatus and supplies are classified in Industry 3661, and radio tubes in Industry 3662.	76.1	94	99

See footnotes at end of table.

MAJOR GROUP 36—ELECTRICAL MACHINERY—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
366	COMMUNICATION EQUIPMENT—Continued			
3669	Communication equipment, n.e.c.----- Establishments primarily engaged in manufacturing electrical communication equipment, not elsewhere classified, such as electric signaling apparatus, audible signals, burglar alarms, electric traffic signals, and railroad signaling devices.	11.0	86	83
369	MISCELLANEOUS ELECTRICAL PRODUCTS			
3691	Storage batteries----- Establishments primarily engaged in manufacturing storage batteries.	16.6	790	99
3692	Primary batteries, dry and wet----- Establishments primarily engaged in manufacturing primary batteries, both dry and wet types.	10.3	790	798
3693	X-ray and therapeutic apparatus (Part of SIC Industry 3693, X-ray and therapeutic apparatus and nonradio electronic tubes [excludes nonradio electronic tubes, except X-ray])----- Establishments primarily engaged in manufacturing electrotherapeutic and electromedical apparatus, X-ray apparatus and tubes, and lamps for infra-red and ultra-violet radiation. Nonradio electronic tubes, other than X-ray tubes, are included in Industry 3662.	7.7	94	93
3699	Electrical products, n.e.c. (Part of SIC Industry 3699, Electrical products, not elsewhere classified [excludes extension cords])----- Establishments primarily engaged in manufacturing electrical products, not elsewhere classified, such as supports, filaments, and lead-in wires for electric lamps, electrical hearing aids, and Christmas tree lighting outfits.	8.7	81	85

MAJOR GROUP 37—TRANSPORTATION EQUIPMENT

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
	The Major Group as a Whole This major group includes establishments engaged in manufacturing equipment for transportation of passengers and cargo by land, air, and water. Important products produced by establishments classified in this major group include motor vehicles, aircraft, ships, boats, railroad equipment, and miscellaneous transportation equipment such as motorcycles, bicycles, and horse-drawn vehicles.			
371	MOTOR VEHICLES AND EQUIPMENT			
3717	Motor vehicles and parts (Includes part of SIC Industry 3711, Motor vehicles [excludes trucks and busses made from purchased chassis]; 3712, Passenger-car bodies; truck and bus bodies for motor vehicle producers from 3713, Trucks and bus bodies; and 3714, Motor-vehicle parts and accessories)----- Establishments primarily engaged in manufacturing or assembling complete passenger automobiles, trucks, commercial cars, and busses (except trackless trolleys—Industry 3742), and special purpose motor vehicles such as ambulances, fire engines, taxicabs, scout cars, personnel carriers, and amphibian motor vehicles. Establishments primarily engaged in manufacturing truck and bus bodies for motor vehicle companies, passenger-car bodies, and motor vehicle parts and accessories are also included in this industry. Parts and accessories include such products as motor vehicle engines and parts, brakes and parts, clutches, axles, radiators, differentials, transmissions, wheels and frames, windshield wipers, and oil filters and strainers. Establishments primarily engaged in manufacturing trucks and busses from purchased chassis are classified in Industry 3713, motorcycles in Industry 3751, wheel-type and track-laying tractors in Industry 3521, tires and tubes in Industry 3011, automobile glass in Major Group 32, motor vehicle hardware in Industry 3429, head lamps in Industry 3471, ignition systems in Industry 3641, and storage batteries in Industry 3691.	653.2	(2)	(2)

See footnotes at end of table.

MAJOR GROUP 37—TRANSPORTATION EQUIPMENT—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
371	MOTOR VEHICLES AND EQUIPMENT—Continued			
3713	Truck and bus bodies (<i>Includes part of SIC Industry 3713, Truck and bus bodies [excludes truck and bus bodies for motor vehicle producers]; and trucks and busses made from purchased chassis from 3711, Motor vehicles</i>)----- Establishments primarily engaged in manufacturing truck and bus bodies for sale to other than motor vehicle companies. Establishments producing trucks and busses from purchased chassis are also included in this industry. Establishments primarily engaged in manufacturing complete trucks and busses are classified in Industry 3717, and stamped body parts for trucks and busses in Industry 3463. The truck and bus body plants of motor vehicle companies and establishments producing truck and bus bodies for sale to motor vehicle companies are included in Industry 3717.	26.6	79	90
3715	Truck trailers ----- Establishments primarily engaged in manufacturing truck trailers and tractor-type bus trailers, but not engaged in manufacturing complete trucks and busses.	12.0	82	88
3716	Automobile trailers (<i>Automobile trailers, for attachment to passenger cars</i>)----- Establishments primarily engaged in manufacturing trailers for attachment to passenger cars, but not engaged in manufacturing complete automobiles. Establishments primarily engaged in the manufacture of truck trailers and tractor-type bus trailers are classified in Industry 3715.	9.3	99	99
372	AIRCRAFT AND PARTS			
3721	Aircraft ----- Establishments primarily engaged in manufacturing or assembling complete aircraft such as airplanes, gliders, dirigibles, and balloons, and which may also manufacture aircraft parts and auxiliary equipment. Establishments primarily engaged in manufacturing engines, propellers, and other aircraft parts and auxiliary equipment, but not engaged in manufacturing or assembling complete aircraft are classified in Industries 3722, 3723, and 3729, respectively.	146.6	(⁸)	(⁸)
3722	Aircraft engines (<i>Aircraft engines and engine parts</i>)----- Establishments primarily engaged in manufacturing aircraft engines and engine parts, but not engaged in manufacturing or assembling complete aircraft. Important products of this industry include internal-combustion and jet-propulsion engines; engine mount parts; air scoops; turbo superchargers; lubricating, cooling, and exhaust systems; non-electric starters; and aircraft engine pumps.	50.3	91	95
3723	Aircraft propellers (<i>Aircraft propellers and propeller parts</i>)----- Establishments primarily engaged in manufacturing aircraft propellers and propeller parts, but not engaged in manufacturing or assembling complete aircraft. Important products of this industry include variable and fixed pitch propellers, and propeller parts such as accumulators, blades, feathering pumps, and governors.	7.4	(⁸)	(⁸)
3729	Aircraft equipment, n.e.c. (<i>Aircraft parts and auxiliary equipment, not elsewhere classified</i>)----- Establishments primarily engaged in manufacturing aircraft parts and auxiliary equipment, not elsewhere classified, but not engaged in assembling complete aircraft. Important products of this industry include airframe assemblies, wing assemblies, flaps and dive brakes, elevators, fins, rudders, and other empennage assemblies, and alighting assemblies and parts such as landing and beaching gear, pontoons, and landing skis; auxiliary equipment such as de-icing equipment, bomb racks, turrets and turret drives, parachutes, targets, link trainers, and other auxiliary equipment specifically adapted for aircraft. Establishments primarily engaged in manufacturing or assembling complete aircraft are classified in Industry 3721, aircraft engines and parts in Industry 3722, propellers and propeller parts in Industry 3723, aeronautical instruments in Industry 3811, and aeronautical electrical equipment in Industry 3641.	15.3	81	38
373	SHIPS AND BOATS			
3731	Ship building and repairing ----- Establishments primarily engaged in building and repairing all types of ships, barges, canal boats and lighters of more than 65 feet in length, whether propelled by sail or motor power or towed by other craft. Establishments primarily engaged in fabricating structural assemblies or components for ships, or subcontractors engaged in ship painting, joinery, carpentry work, electrical wiring installation, etc., are not classified in this industry. Shipyards engaged in repair work, either exclusively or as their major activity, are included in this industry.	130.2	(⁹)	(⁹)
3732	Boat building and repairing ----- Establishments primarily engaged in building and repairing all types of boats of 65 feet or less in length, such as motorboats, sailboats, rowboats, lifeboats, and canoes. Small establishments (less than 10 employees) repairing boats, but not engaged in other manufacturing activity, are excluded from the scope of this census.	19.5	(⁹)	(⁹)

See footnotes at end of table.

CENSUS OF MANUFACTURES: 1947

MAJOR GROUP 37—TRANSPORTATION EQUIPMENT—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
374	RAILROAD EQUIPMENT			
3741	Locomotives and parts Establishments primarily engaged in building and rebuilding locomotives (including frames and parts) of any type or gauge, including steam, compressed air, straight-electric, storage battery, Diesel-electric, gasoline-electric, and Diesel-mechanical. Railroad shops primarily engaged in locomotive repair are classified in nonmanufacturing industries.	30.3	95	83
3742	Railroad and street cars Establishments primarily engaged in building and rebuilding railroad, street, and rapid-transit cars and car equipment for operation on rails for freight and passenger service. This industry also includes establishments primarily engaged in manufacturing trackless trolley busses and industrial rail cars (not suitable for carrier use). Establishments primarily engaged in manufacturing mining cars are classified in Industry 3531. Establishments primarily engaged in repairing railroad and street cars are classified in nonmanufacturing industries.	60.8	91	91
375	MOTORCYCLES AND BICYCLES			
3751	Motorcycles and bicycles (Motorcycles, bicycles, and parts) Establishments primarily engaged in manufacturing motorcycles and side cars; motor scooters; bicycles; and motorcycle and bicycle parts such as saddles, seat posts, frames, gears, and handlebars. Establishments assembling motorcycles or bicycles from purchased parts are also included in this industry. Establishments primarily engaged in manufacturing children's vehicles are classified in Industry 3943.	15.6	87	89
379	TRANSPORTATION EQUIPMENT, NOT ELSEWHERE CLASSIFIED			
3799	Transportation equipment, n.e.c. Establishments primarily engaged in manufacturing transportation equipment, not elsewhere classified, such as horse-drawn vehicles (farm wagons and trucks, carriages, sleighs, and sleds) and parts; and wheelbarrows and pushcarts. Establishments primarily engaged in manufacturing industrial trucks, tractors, trailers, and stackers are classified in Industry 3565, and children's vehicles in Industry 3943.	4.6	74	64

MAJOR GROUP 38—INSTRUMENTS AND RELATED PRODUCTS

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
	The Major Group as a Whole This major group includes establishments engaged in manufacturing mechanical measuring, laboratory, and scientific instruments; optical instruments and lenses; surgical, medical, and dental instruments, equipment and supplies; ophthalmic goods; photographic equipment and supplies; watches and clocks. Establishments primarily engaged in manufacturing instruments for indicating, measuring, and recording electrical quantities and characteristics are classified in Industry 3613. Dental laboratories making dentures and artificial teeth to order for the dental profession, and establishments grinding ophthalmic lenses on an individual prescription basis are classified in nonmanufacturing industries.			
381	SCIENTIFIC INSTRUMENTS			
3811	Scientific instruments (Laboratory, scientific, and engineering instruments—except surgical, medical, and dental) Establishments primarily engaged in manufacturing laboratory, scientific, and engineering instruments such as nautical, navigational, aeronautical, surveying, drafting, mathematical instruments, and instruments for laboratory work and scientific research (except microscopes and telescopes—Industry 3831). Establishments primarily engaged in manufacturing surgical and medical instruments are classified in Industry 3841, dental instruments and equipment in Industry 3843, mechanical measuring and controlling instruments in Industry 3821, machinists' precision measuring tools in Industry 3543, and instruments for indicating measuring and recording electrical quantities and characteristics in Industry 3613.	20.4	82	84

See footnotes at end of table.

MAJOR GROUP 38—INSTRUMENTS AND RELATED PRODUCTS—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
382	MECHANICAL MEASURING INSTRUMENTS			
3821	Mechanical measuring instruments (<i>Mechanical measuring and controlling instruments</i>)----- Establishments primarily engaged in manufacturing mechanical instruments for indicating, recording, measuring, and controlling temperature, pressure, mechanical motion, rotation, flow, liquid level, humidity, density, acidity, alkalinity, and combustion; dial pressure gauges; physical-property testing apparatus such as hardness, tension, compression, torsion, ductility, and elasticity testing apparatus; and instruments for household and office use such as thermometers, barometers, and rain gauges. Establishments primarily engaged in manufacturing instruments for indicating, measuring, and recording electrical quantities and characteristics are classified in Industry 3613, watches and clocks in Industry 3871, and measuring-and-dispensing pumps in Industry 3586.	53.2	83	84
383	OPTICAL INSTRUMENTS AND LENSES			
3831	Optical instruments and lenses ----- Establishments primarily engaged in grinding optical lenses and prisms, and in manufacturing microscopes, telescopes, field and opera glasses, and related optical instruments such as refractometers, spectrometers, spectroscopes, colorimeters, polariscopes, and optical measuring instruments. Establishments primarily engaged in manufacturing eyeglass lenses, frames, or fittings are classified in Industry 3851.	6.5	91	70
384	MEDICAL INSTRUMENTS AND SUPPLIES			
3841	Surgical and medical instruments ----- Establishments primarily engaged in manufacturing surgical, veterinary, orthopedic, and other medical instruments. Establishments primarily engaged in manufacturing surgical and orthopedic appliances are classified in Industry 3842, and electrotherapeutic, electromedical, and X-ray apparatus in Industry 3693.	7.0	83	88
3842	Surgical appliances and supplies (<i>Surgical and orthopedic appliances and supplies; and personal safety devices, not elsewhere classified</i>)----- Establishments primarily engaged in manufacturing surgical and orthopedic appliances and supplies, including surgical gut strings; hospital and surgical sterilizers; artificial limbs; fracture appliances; elastic hosiery, arch supports, and other foot appliances; abdominal supporters, braces, and trusses; sanitary napkins; bandages; surgical gauze and dressings; adhesive tapes and medicated plasters; and personal safety appliances and supplies, not elsewhere classified. Establishments primarily engaged in manufacturing surgical and medical instruments are classified in Industry 3841.	22.3	83	92
3843	Dental equipment and supplies ----- Establishments primarily engaged in manufacturing dental instruments, mechanical devices, and other equipment and supplies for use by dentists. Dental laboratories making dentures and artificial teeth to order for the dental profession are classified in service industries.	9.1	97	94
385	OPHTHALMIC GOODS			
3851	Ophthalmic goods ----- Establishments primarily engaged in grinding ophthalmic lenses, and in manufacturing other ophthalmic goods such as eyeglass frames or fittings. Retail establishments fitting eyeglasses to individual order are classified in trade industries. Establishments primarily engaged in grinding optical lenses to individual order are classified in non-manufacturing industries.	22.5	86	97
386	PHOTOGRAPHIC EQUIPMENT			
3861	Photographic equipment (<i>Photographic equipment and supplies</i>)----- Establishments primarily engaged in manufacturing photographic apparatus, equipment, and supplies. Important products of this industry include apparatus such as still cameras, motion-picture cameras, projection apparatus, photocopy and microfilm machines; equipment such as plate and film holders, tripods, film reels, developing tanks and machines, enlargers, and motion-picture screens; and supplies such as sensitized film, paper, and plates; and prepared developers, fixers, and toners. Establishments primarily engaged in manufacturing photographic paper stock (unsensitized), paper mounts, mats, easels, and folders are classified in Major Group 26, chemicals for photographic or technical purposes in Major Group 28, photographic glass in Major Group 32, and photographic lenses in Industry 3831. The processing of film and the respooling of film are classified in nonmanufacturing industries.	50.9	96	97

See footnotes at end of table.

MAJOR GROUP 38—INSTRUMENTS AND RELATED PRODUCTS—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
387	WATCHES AND CLOCKS			
3871	Watches and clocks (<i>Watches, clocks, and parts, except watchcases</i>)----- Establishments primarily engaged in manufacturing clocks including electric, watches, mechanisms for clockwork-operated devices, and clock and watch parts. This industry includes establishments primarily engaged in assembling clocks and watches from purchased movements and cases. Establishments primarily engaged in manufacturing watchcases are classified in Industry 3872, glass crystals in Industry 3231, and unbreakable crystals in Industry 3971. Establishments primarily engaged in manufacturing time-recording clocks, time-stamp machines, and watchmen's clocks are classified in Industry 3579.	34.6	97	98
3872	Watchcases ----- Establishments primarily engaged in the manufacture of watchcases, for sale as such. Establishments whose primary activity is the assembling of watches from purchased movements and watchcases of their own manufacture are classified in Industry 3871.	5.6	87	94

MAJOR GROUP 39—MISCELLANEOUS MANUFACTURES

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
	The Major Group as a Whole This major group includes establishments primarily engaged in manufacturing products not classified in any other manufacturing major group. Industries in this group fall into the following categories: Jewelry, silverware and plated ware; musical instruments; toys, sporting and athletic goods; pens, pencils, and other office and artists' materials; buttons, costume novelties, miscellaneous notions, fabricated plastics products; brooms and brushes; morticians' goods; and other miscellaneous manufacturing industries.			
391	JEWELRY AND SILVERWARE			
3911	Jewelry, precious metal ----- Establishments primarily engaged in manufacturing jewelry and other articles (to be worn on or carried about the person) made of precious metals with or without precious stones, including cigarette cases and lighters, vanity cases and compacts; trimmings for umbrellas and canes; and jewel settings and mountings. Establishments primarily engaged in manufacturing costume jewelry from nonprecious metal, including base metals electroplated with gold, silver, etc., and other materials are classified in Industry 3961.	25.6	92	95
3912	Jewelers' findings (<i>Jewelers' findings and materials</i>)----- Establishments primarily engaged in manufacturing unassembled jewelry parts, and stock shop products such as sheet, wire, and tubing. Establishments primarily engaged in lapidary work are classified in Industry 3913.	6.1	92	93
3913	Lapidary work ----- Establishments primarily engaged in all types of lapidary work, including cutting and polishing diamonds and other precious stones; drilling pearls; recutting and setting stones; preparing jewels for instruments, tools, and for watches and chronometers; and preparing real and imitation stones for settings.	1.7	98	98
3914	Silverware and plated ware ----- Establishments primarily engaged in manufacturing flatware (including knives, forks, and spoons), hollow ware, toilet ware, ecclesiastical ware, and related products made of sterling silver; of metal plated with silver, gold, or other metal; of nickel-silver; or of pewter.	21.5	98	97

See footnotes at end of table.

MAJOR GROUP 39—MISCELLANEOUS MANUFACTURES—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
393	MUSICAL INSTRUMENTS AND PARTS			
3931	Pianos ----- Establishments primarily engaged in manufacturing complete pianos of all types.	7.0	94	100
3932	Organs ----- Establishments primarily engaged in manufacturing complete pipe organs, reed organs, electronic organs, and organs with electrical amplification.	1.3	85	70
3933	Piano and organ parts (Piano and organ parts and materials) ----- Establishments primarily engaged in manufacturing piano and organ parts and materials. These products include piano strings, plates, keys, actions, keyboards, back frames, pedal attachments, hammers, sounding boards, organ reeds, pipes, stops, knobs, and music rolls. Establishments primarily engaged in manufacturing complete pianos are classified in Industry 3931, and complete organs in Industry 3932.	3.2	95	82
3939	Musical instruments, n.e.c. (Musical instruments, parts, and materials, not elsewhere classified) ----- Establishments primarily engaged in manufacturing all kinds of musical instruments, parts, and materials, except pianos (Industry 3931), organs (Industry 3932) and piano and organ parts and materials (Industry 3933). Important products of this industry include saxophones, trumpets, guitars, violins, drums, etc.	5.4	93	90
394	TOYS AND SPORTING GOODS			
3941	Games and toys, n.e.c. (Games and toys, except dolls, and children's vehicles) ----- Establishments primarily engaged in manufacturing indoor games and game sets for adults and children, and mechanical and nonmechanical toys. Important products of this industry include games such as chess, checkers, dominoes, puzzles, and other indoor games; and toys such as toy furniture, doll carriages and carts, construction sets, mechanical trains, toy guns and air rifles, and other mechanical games and toys. Establishments primarily engaged in manufacturing dolls are classified in Industry 3942, children's outdoor wheel goods and vehicles in Industry 3943, and sporting and athletic goods for children and adults in Industry 3949.	27.1	92	90
3942	Dolls ----- Establishments primarily engaged in manufacturing dolls, doll parts, and doll clothing. Establishments primarily engaged in manufacturing stuffed toy animals are also classified in this industry.	9.8	89	98
3943	Children's vehicles ----- Establishments primarily engaged in manufacturing baby carriages, strollers, and go-carts; children's velocipedes and tricycles, coaster wagons, play cars, sleds, and other children's outdoor wheel goods and vehicles.	8.8	81	79
3949	Sporting and athletic goods ----- Establishments primarily engaged in manufacturing sporting and athletic goods, not elsewhere classified, such as fishing tackle; golf and tennis goods; baseball, football, basketball, and boxing equipment; roller skates and ice skates; gymnasium and playground equipment; billiard and pool tables; and bowling alleys and equipment. Establishments primarily engaged in manufacturing athletic apparel are classified in Major Group 23, small arms ammunition in Industry 1961, and firearms in Industry 1951.	29.8	94	90
395	OFFICE SUPPLIES			
3951	Pens and mechanical pencils (Pens, mechanical pencils, and pen points) ----- Establishments primarily engaged in manufacturing fountain pens, stylographic pens, mechanical pencils, pen points, penholders, and parts for pens and mechanical pencils.	15.6	93	95
3952	Lead pencils and crayons ----- Establishments primarily engaged in manufacturing lead pencils, pencil leads, and crayons. Establishments primarily engaged in manufacturing mechanical pencils are classified in Industry 3951.	6.3	91	90
3953	Hand stamps and stencils (Hand stamps, stencils, and brands) ----- Establishments primarily engaged in manufacturing rubber and metal hand stamps, dies, and seals; steel letters and figures; stencils for use in painting or marking; and branding irons.	4.7	90	89

See footnotes at end of table.

MAJOR GROUP 39—MISCELLANEOUS MANUFACTURES—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
395	OFFICE SUPPLIES—Continued			
3954	Artists' materials..... Establishments primarily engaged in manufacturing materials and equipment for art work, such as airbrushes, drawing tables and boards, palettes, sketch boxes, pantographs, artists' colors and waxes, pyrography goods, drawing inks, and drafting materials. Establishments primarily engaged in manufacturing drafting instruments are classified in Industry 3811.	1.4	79	74
3955	Carbon paper and inked ribbons..... Establishments primarily engaged in manufacturing carbon paper, spirit and gelatin process stencil paper, and inked ribbons for typewriters, adding, and other business machines.	3.7	790	790
396	COSTUME JEWELRY AND NOTIONS			
3961	Costume jewelry (<i>Includes SIC Industry 3961, Costume jewelry and costume novelties, except precious metal; cigar and cigarette cases, vanity cases and compacts, except precious metal, from 3986, Jewelry cases and instrument cases; and cigar and cigarette lighters, except precious metal, from 3999, Miscellaneous fabricated products, not elsewhere classified</i>)..... Establishments primarily engaged in manufacturing costume jewelry, costume novelties, cigarette cases, compacts, vanity cases, cigarette lighters, and ornaments made of all materials, except precious metal and precious or semiprecious stones (Industry 3911).	25.4	90	90
3962	Artificial flowers (<i>Feathers, plumes, and artificial flowers</i>)..... Establishments primarily engaged in manufacturing artificial flowers, fruits, and foliage made from all materials, except glass (Industry 3231); in producing fancy feathers, plumes, and articles made principally of feathers and plumes; and curling, dyeing, and renovating ostrich feathers for the trade.	7.1	97	99
3963	Buttons..... Establishments primarily engaged in manufacturing buttons, button parts, and button blanks and molds, of all materials, except precious metal and precious and semiprecious stones (Industry 3911).	10.4	93	94
3964	Needles, pins, and fasteners (<i>Needles, pins, hooks and eyes, and similar notions</i>)..... Establishments primarily engaged in manufacturing notions such as machine and hand needles, pins, hooks and eyes, eyelets, buckles, and slide and snap fasteners.	23.0	91	89
397	PLASTICS PRODUCTS, NOT ELSEWHERE CLASSIFIED			
3971	Plastics products, n.e.c. (<i>Fabricated plastics products, not elsewhere classified</i>)..... Establishments primarily engaged in molding primary plastics for the trade, and manufacturing finished plastics products, not elsewhere classified. Establishments primarily engaged in manufacturing plastics materials in the form of sheets, rods, tubes, granules, powders, or liquids are classified in Industry 2823.	60.1	88	91
399	MISCELLANEOUS MANUFACTURES			
3981	Brooms and brushes..... Establishments primarily engaged in manufacturing household, industrial, and street-sweeping brooms; and brushes such as paint brushes, tooth brushes, toilet brushes, and household and industrial brushes.	18.6	94	99
3982	Cork products..... Establishments primarily engaged in manufacturing cork products from whole or ground cork. Important products of this industry include bottle corks, life preservers, insulating materials, tile, and other articles made of cork. Establishments primarily engaged in manufacturing cork gaskets are classified in 3293, and linoleum and cork floor coverings in Industry 2274.	2.5	88	75
3983	Matches..... Establishments primarily engaged in manufacturing matches, regardless of the material used.	7.4	100	100
3984	Candles..... Establishments primarily engaged in manufacturing candles for lighting or for decorative and ceremonial purposes from such materials as fatty acids, mineral or animal waxes.	2.4	91	87

See footnotes at end of table.

MAJOR GROUP 39—MISCELLANEOUS MANUFACTURES—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
399	MISCELLANEOUS MANUFACTURES—Continued			
3985	Fireworks and pyrotechnics Establishments primarily engaged in manufacturing fireworks of all kinds, flares, flash-light bombs, and railroad torpedoes and fuses. Establishments primarily engaged in manufacturing safety fuses and detonators are classified in Industry 2826.	3.3	97	96
3986	Jewelry and instrument cases (<i>Part of SIC Industry 3986, jewelry cases and instrument cases [excludes cigar and cigarette cases, vanity cases, and compacts]</i>)..... Establishments primarily engaged in manufacturing cases, fancy boxes, and trays for jewelry, instruments, cutlery, eyeglasses, combs, pipes, toilet sets, etc. Cigar and cigarette cases, compacts and vanity cases not made of precious metals are included in Industry 3961. Establishments primarily engaged in manufacturing similar cases of leather are classified in Industry 3172, and precious metals in Group 391.	7.4	83	82
3987	Lamp shades Establishments primarily engaged in manufacturing lamp shades of all materials, except glass (Industry 3229) and metal (Industry 3471).	4.5	93	93
3988	Morticians' goods Establishments primarily engaged in manufacturing caskets, coffins, burial cases, and coffin shipping cases, whether of wood or other materials (except concrete—Industry 3271); morticians' supplies and accessories such as burial garments, gloves, slippers, casket linings, and embalming fluids; and morticians' paraphernalia and equipment.	22.4	90	97
3991	Beauty and barber-shop equipment (<i>Includes part of SIC Industry 3991, Beauty-shop and barber-shop equipment [excludes special furniture, other than hydraulic chairs]; and hair clippers for human use from 3421, Cutlery</i>)..... Establishments primarily engaged in manufacturing equipment for use in beauty shops and barber shops. Hair clippers for use on humans are included in this industry. Hydraulic chairs and couch units are classified in this industry, but all other furniture used in beauty and barber shops is classified in Industry 2532. Cosmetics, soaps, and permanent waving solutions are classified in Major Group 28.	4.1	59	79
3992	Furs, dressed and dyed Establishments primarily engaged in scraping, currying, tanning, bleaching, and dyeing pelts.	6.8	(³)	(³)
3993	Signs and advertising displays Establishments primarily engaged in manufacturing electrical, mechanical, cut-out, or plate signs and advertising displays, including neon signs and advertising novelties. Sign-painting shops doing business on a custom basis are classified in service industries. Establishments primarily engaged in manufacturing electric signal equipment are classified in Industry 3669, and lighting fixtures in Industry 3471.	28.9	95	8
3994	Hair work Establishments primarily engaged in manufacturing wigs, toupees, transformations, switches, and related articles made largely from human hair, but in some cases from animal hair or various fibers. Establishments primarily engaged in making wigs for dolls are also included in this industry.	.2	195	99
3995	Umbrellas, parasols, and canes Establishments primarily engaged in manufacturing umbrellas, parasols, canes, and trimmings, frames, handles, and other parts.	3.6	97	100
3996	Tobacco pipes (<i>Tobacco pipes and cigarette holders</i>)..... Establishments primarily engaged in manufacturing tobacco pipes, and cigarette and cigar holders.	3.1	(^d)	(^d)
3997	Soda-fountain and bar equipment (<i>Soda-fountain and beer-dispensing equipment</i>)..... Establishments primarily engaged in manufacturing soda fountains and beer-dispensing equipment; and tanks, siphons, and other parts and accessories for such equipment.	2.7	83	76
3998	Models and patterns, except paper (<i>Part of SIC 3998, Models and patterns, except paper patterns [excludes industrial patterns and molds]</i>)..... Establishments primarily engaged in manufacturing models, patterns, and forms of all materials, except paper patterns (Industry 2699), shoe display forms (Industry 2492), and patterns and molds for industrial uses—foundries, etc. (Industry 3559).	1.9	96	91

See footnotes at end of table.

MAJOR GROUP 39—MISCELLANEOUS MANUFACTURES—Continued

Industry group and industry code	TITLE AND DESCRIPTION	All employees—average for 1947 (thousands)	1947 shipments of primary products by this industry as a percent of—	
			This industry's shipments of all products	Shipments of these products by all industries
399	MISCELLANEOUS MANUFACTURES—Continued			
1951	Small arms Establishments primarily engaged in manufacturing small firearms having a bore under 20 mm. (caliber .60 and under). Important products of this industry include machine guns and other automatic arms, rifles, carbines, pistols, revolvers, shotguns, pyrotechnic pistols and projectors, machine gun mounts, and parts for small firearms.	10.5	95	98
1961	Small arms ammunition Establishments primarily engaged in manufacturing ammunition for small arms having a bore under 20 mm. (caliber .60 and under). Establishments primarily engaged in manufacturing blasting and detonating caps and safety fuses are classified in Industry 2826, and fireworks in Industry 3935.	8.1	790	790
3999	Miscellaneous products, n.e.c. (<i>Part of SIC Industry 3999, Miscellaneous fabricated products, not elsewhere classified [excludes cigar and cigarette lighters]</i>)..... Establishments primarily engaged in manufacturing portable fire extinguishers; theatrical scenery and advertising curtains; braided articles; holiday goods; military insignia; identification plates, badges, emblems, and tags; and many other small articles, not elsewhere classified. Establishments primarily engaged in wool pulling and in dressing hair and bristles are also included in this industry.	20.6	89	92
	SPECIAL REPORT			
	Motion pictures Establishments primarily engaged in the production of motion-picture films. This industry covers all activities and processes connected with the production of motion-picture films, such as the preparation of stories and scenes, photography, development of exposed films, the printing of projection films, and other necessary studio and laboratory work. Distribution and exhibition of motion-picture films are not included.	34.8	(³)	(³)

⁴ Withheld to avoid disclosing figures for individual companies.

¹ Percentage of value of primary products to total shipments, including primary and secondary products, and miscellaneous receipts for contract and commission work on materials owned by others, scrap and salable refuse, repair, etc.

² Percentages not meaningful because total value of primary products shipped by specified industry includes a significant amount of duplication.

³ Relationships not meaningful because of the predominance of miscellaneous receipts, particularly receipts for contract and commission work on materials owned by others.

⁴ Value of finishing own goods by this industry as a percent of value of finishing of own goods by all industries.

⁵ Percentage based on quantity of yarn production rather than value of shipments.

⁶ An unknown amount of receipts for toll operations are included in primary products.

⁷ These are minimum percentage figures. The exact percentage cannot be shown without disclosing figures for individual companies.

⁸ Percentages not meaningful because total value of primary products shipped by the specified industry does not reflect the larger expenditures made by establishments during the year for research, design, and developmental work.

⁹ Percentages not meaningful because of the large proportion of receipts for repair work to total value of shipments.

APPENDIX D

DERIVATION OF 1939 INDUSTRY DATA COMPARABLE WITH 1947 CENSUS INDUSTRY CLASSIFICATIONS

The difference in the scope of manufacturing between 1939 and 1947 is described in the General Explanations, Section 8, Change in scope between 1939 and 1947. In 1947 the manufacturing division comprises 453 industries which are included in 144 industry groups and 20 industry major groups; in 1939 there were 446 industries in 127 industry groups and 20 industry major groups.

Following are the more important changes within the manufacturing division between the 1939 and 1947 census industrial classification systems: (a) merger of regular and contract textile mill and apparel industries; (b) establishment of a major group for lumber and wood products from the 1939 major group for lumber and timber basic products and part of the major group for furniture and finished lumber products; (c) breakdown of new chemical industries from broader 1939 industries, such as the Drugs and Chemicals and Chemicals, Not Elsewhere Classified, Industries; (d) rearrangement of industries of the 1939 major groups for iron and steel and their products, and for nonferrous metals and their products, to constitute the new 1947 major groups for primary metal industries, and for fabricated metal products (except machinery and transportation equipment); (e) combination of the two 1939 major groups for automobiles and equipment, and for other transportation equipment, to form a single major group for all transportation equipment; (f) establishment of a separate major group for professional, scientific, and controlling instruments, photographic and optical goods; watches and clocks, derived mainly from the 1939 major group for miscellaneous industries; (g) breakdown into more detailed industry classifications of some of the 1939 industries, mainly: electric generating, distribution, and industrial apparatus; radios, radio tubes, and phonographs; communication equipment; electric appliances; sawmills,

veneer mills, and cooperage stock mills; bookbinding and related industries; footwear; and aircraft and parts.

The table below shows the 1939 census industries or parts of retabulated 1939 census industries equivalent to each of the 453 industry classifications used in the 1947 census. It shows how the 1939 statistics for industry classifications comparable with those used in the 1947 census were derived from a retabulation of the 1939 census schedules. For additional details regarding the comparability of 1939 and 1947 industry classifications and statistics, see the text for each of the 1947 industries in the Industry Volume. The first column lists the 1947 census industry code; the second column, the equivalent 1939 census industry code (asterisked code means only part of the 1939 industry is included). The "Title" column shows the 1947 census industry short title corresponding to each of the 1947 census industry codes. Where a 1947 industry classification is the same as that for 1939, only the 1947 short industry title is shown, even though in some cases, it might differ from the 1939 industry title. Where a 1947 census industry is not identical with a single 1939 industry classification, the equivalent whole or part 1939 census industries are indented below the corresponding 1947 census industry titles, and the following details are shown: (a) titles (many are abbreviated) of the 1939 census industries from which data comparable with 1947 census industry classifications were derived, and (b) where applicable, a bracket annotating the specific part of the 1939 industry covered, followed by (c) parentheses containing reference to other 1947 census industries into which the original 1939 census industry was distributed. The following abbreviations are used: n.a.—Not available; n.m.—Nonmanufacturing; n.e.c.—Not elsewhere classified.

CENSUS OF MANUFACTURES: 1947

[Production workers (average for the year) in thousands, to nearest tenth]

INDUSTRY CLASSIFICATION			1947		1939	
1947 Code	1939 Code	TITLE	Number of estab-lishments	Production workers	Number of estab-lishments	Production workers
MAJOR GROUPS 20—FOOD AND KINDRED PRODUCTS						
2011		Meat packing, wholesale.....	2,153	167.1	1,392	115.0
	111*	Meat packing, wholesale (see 2013, n.m.).....			1,352	114.4
	112	Custom slaughtering, wholesale.....			40	.6
2013		Prepared meats.....	1,264	34.5	1,107	17.6
	111*	Meat packing, wholesale [meat canning, curing—no slaughtering] (see 2011).....			93	5.3
	113	Sausages and prepared meats.....			1,067	11.3
	114	Sausage casings [natural].....			37	1.0
2015		Poultry dressing, wholesale.....	557	19.2	752	14.0
	115*	Poultry dressing, wholesale [excludes canned poultry, chicken soup] (see 2033).....			752	14.0
2021	121	Creamery butter ¹	1,633	15.2	3,506	18.0
2022	122	Natural cheese ¹	1,711	10.5	2,682	5.9
2023	123	Concentrated milk ¹	428	14.0	562	9.7
2024		Ice cream and ices ¹	1,521	23.2	2,696	15.4
	124*	Ice cream and ices (see n.m.).....			2,696	15.4
2025	125	Special dairy products ¹	130	6.1	51	2.4
2031	131	Canned sea food.....	254	18.9	214	15.7
2032	132	Cured fish.....	127	2.1	114	1.9
2033		Canning and preserving, except fish.....	2,265	121.9	1,899	93.6
	115*	Poultry dressing, wholesale [canned poultry, chicken soup] (see 2015).....			13	.5
	133*	Canned and dried fruits and vegetables (see 2034, 2037, 2092).....			1,705	89.2
	134	Preserves, jams, and jellies.....			171	3.7
	199*	Food preparations, n.e.c. [mincemeat] (see 2090, 2099).....			10	.2
2034		Dehydrated fruits and vegetables ²	146	3.7	259	8.1
	133*	Canned and dried fruits and vegetables (see mainly 2033, 2037).....			259	8.1
2035		Pickles and sauces.....	743	18.6	511	12.5
	135	Pickles and sauces.....			377	9.9
	136	Salad dressings.....			134	2.6
2037		Frozen foods.....	291	15.8	61	3.3
	133*	Canned and dried fruits and vegetables [cold packed] (see 2033, 2034, 2092).....			25	.7
	137	Quick-frozen foods.....			36	2.6
2041	141	Flour and meal.....	1,243	30.7	2,143	24.8
2042	142	Prepared animal feeds.....	2,689	40.3	1,383	15.4
2043	143	Cereal preparations.....	64	9.5	70	7.5
2044	144	Rice cleaning and polishing.....	88	3.3	72	2.3
2045	145	Blended and prepared flour.....	122	2.3	78	.7
2051		Bread and other bakery products.....	6,797	150.1	10,325	180.2
	151*	Bread and other bakery products (see n.m.).....			10,325	180.2
2052	152	Biscuit, crackers, and pretzels.....	326	37.5	356	29.2
2061	161	Raw cane sugar.....	82	4.0	78	4.2
2062	162	Cane-sugar refining.....	25	15.1	27	14.1
2063	163	Beet sugar.....	74	11.6	85	10.4
2071	171	Confectionery products.....	1,686	64.9	1,252	49.7
2072	172	Chocolate and cocoa products.....	31	7.7	30	6.5
2073	173	Chewing gum.....	37	5.5	27	2.6
2081	181	Bottled soft drinks.....	5,618	41.2	4,504	21.3
2082	182	Malt liquors.....	440	63.7	605	36.1
2083	183	Malt.....	53	2.1	52	1.5
2084		Wines and brandy.....	418	5.8	348	2.3
	184	Wines.....			301	2.0
	185*	Liquors, distilled [brandy] (see 2085).....			46	.3
	186*	Liquors, rectified or blended [brandy] (see 2085).....			1	
2085		Distilled liquors, except brandy ³	226	25.7	236	6.6
	185*	Liquors, distilled [excludes brandy] (see 2084).....			89	3.8
	186*	Liquors, rectified or blended [excludes brandy] (see 2084).....			147	2.8
2091	191	Leavening compounds.....	48	2.4	47	2.3
2092		Shortening and cooking oils.....	100	5.9	82	4.9
	133*	Canned and dried fruits and vegetables [olive oil] (see 2033, 2034, 2037).....			18	.1
	192	Edible fats and oils, n.e.c.			64	4.8
2093	193	Oleomargarine.....	27	1.8	18	1.0
2094	194	Corn products.....	55	10.2	35	6.8
2095	195	Flavorings.....	606	7.2	477	3.6
2096	196	Vinegar and cider.....	118	.8	132	1.1
2097	197	Manufactured ice.....	3,432	29.0	3,975	15.9
2098	198	Macaroni and spaghetti.....	226	6.6	328	6.0
2099		Liquid, frozen, and dried eggs.....	154	8.7	41	1.4
	199*	Food preparations, n.e.c. (see 2033, 2099).....			41	1.4
2099		Food preparations, n.e.c. ⁴	1,925	35.0	n.a.	n.a.
	199*	Food preparations, n.e.c. (see 2033, 2099).....			n.a.	n.a.

See footnotes at end of table.

INDUSTRY CLASSIFICATION			1947		1939	
1947 Code	1939 Code	TITLE	Number of estab- lishments	Production workers	Number of estab- lishments	Production workers
MAJOR GROUPS 21—TOBACCO MANUFACTURES						
2111	211	Cigarettes.....	28	25.6	35	27.4
2121	221	Cigars.....	822	44.5	598	50.9
2131	231	Chewing and smoking tobacco.....	73	9.7	132	9.2
2141	6	Tobacco stemming and redrying.....	163	23.5	n.a.	n.a.
MAJOR GROUPS 22—TEXTILE MILL PRODUCTS						
2211	-----	Scouring and combing plants.....	74	7.0	49	6.7
	313*	Cotton yarn (see 2224, 2233, 2241).....			1	(7)
	334*	Rayon yarn and thread—regular factories or jobbers (see 2222-2225).....			2	
	341*	Woolen and worsted manufactures—regular factories or jobbers (see 2212, 2213).....			20	
	342*	Woolen and worsted manufactures—contract factories (see 2212, 2213).....			26	
2212	-----	Yarn mills, wool, except carpet.....	200	31.5	135	22.8
	341*	Woolen and worsted manufactures—regular factories or jobbers (see 2211, 2213).....			116	21.6
	342*	Woolen and worsted manufactures—contract factories (see 2211, 2213).....			19	1.2
2213	-----	Woolen and worsted fabrics.....	495	122.4	478	116.7
	341*	Woolen and worsted manufactures—regular factories or jobbers (see 2211, 2212).....			447	115.7
	342*	Woolen and worsted manufactures—contract factories (see 2211, 2212).....			31	1.0
2216	343	Finishing wool textiles.....	59	5.1	63	3.8
2222	-----	Yarn throwing mills.....	122	13.8	161	25.7
	324*	Silk yarn and thread—regular factories or jobbers (see 2223, 2225).....			37	6.6
	325	Silk throwing and spinning—contract factories.....			78	12.4
	334*	Rayon yarn and thread—regular factories or jobbers (see 2211, 2223-2225).....			24	4.4
	335*	Rayon throwing and spinning—contract factories (see 2223, 2225).....			22	2.3
2223	-----	Thread mills.....	89	13.1	87	14.3
	314	Cotton thread.....			75	13.3
	324*	Silk yarn and thread—regular factories or jobbers (see 2222, 2225).....			9	1.0
	334*	Rayon yarn and thread—regular factories or jobbers (see 2211, 2222, 2224, 2225).....			2	
	335*	Rayon throwing and spinning—contract factories (see 2222, 2225).....			1	
2224	-----	Yarn mills, cotton system.....	404	88.8	325	62.5
	313*	Cotton yarn (see 2211, 2233, 2241).....			323	62.5
	334*	Rayon yarn and thread—regular factories or jobbers (see 2211, 2222, 2223, 2225).....			2	
			43	1.6	38	2.9
2225	-----	Yarn mills, silk system.....				
	324*	Silk yarn and thread—regular factories or jobbers (see 2222, 2223).....			7	1.6
	334*	Rayon yarn and thread—regular factories or jobbers (see 2211, 2222-2224).....			22	1.1
	335*	Rayon throwing and spinning—contract factories (see 2222, 2223).....			9	.2
2233	-----	Cotton broad-woven fabrics.....	602	342.4	661	318.9
	311*	Cotton broad-woven goods [excludes fish netting] (see 2298).....			653	311.8
	313*	Cotton yarn [tire cord] (see 2211, 2224, 2241).....			8	7.1
2234	-----	Rayon and related broad-woven fabrics.....	507	91.2	394	79.6
	321	Silk broad-woven goods—regular factories or jobbers.....			82	8.8
	322	Silk broad-woven goods—contract factories.....			37	1.1
	331	Rayon broad-woven goods—regular factories or jobbers.....			196	65.4
	332	Rayon broad-woven goods—contract factories.....			79	4.3
2241	-----	Narrow fabric mills.....	479	24.9	400	24.6
	312	Cotton narrow fabrics.....			163	13.3
	313*	Cotton yarn [covered rubber thread] (see 2211, 2224, 2233).....			17	1.0
	323	Silk narrow fabrics.....			100	4.3
	333	Rayon narrow fabrics.....			120	6.0
			738	65.1	499	97.2
2251	351	Full-fashioned hosiery mills.....	617	61.3	433	61.9
2252	352	Seamless hosiery mills.....				
			1,201	30.6	725	23.4
2253	-----	Knit outerwear mills.....				
	354	Knitted outerwear—regular factories or jobbers.....			479	18.4
	355	Knitted outerwear—contract factories.....			233	4.1
	356*	Knitted underwear [tee, basque, polo shirts] (see 2254).....			13	.9
			172	37.5	184	37.5
2254	-----	Knit underwear mills.....			184	37.5
	356*	Knit underwear mills [excludes tee, basque, polo shirts] (see 2253).....				
			46	5.0	20	5.6
2255	357	Knit glove mills.....	308	12.5	143	9.5
2256	-----	Knit-fabric mills.....			143	9.5
	353*	Knitted cloth (see 2259).....	44	.9	85	1.5
2259	-----	Knitting mills, n.e.c.....			85	1.5
	353*	Knitted cloth (see 2256).....	641	69.0	468	60.2
2261	361	Finishing textiles, except wool.....				

See footnotes at end of table.

INDUSTRY CLASSIFICATION			1947		1939	
1947 Code	1939 Code	TITLE	Number of estab- lishments	Production workers	Number of estab- lishments	Production workers
MAJOR GROUPS 22—TEXTILE MILL PRODUCTS—Continued						
2271		Wool carpets, rugs, and carpet yarn.....	95	35.6	61	28.7
	371	Carpets and rugs, wool.....			43	25.6
	372	Carpet yarn, woolen and worsted.....			18	3.1
2273	373	Carpets and rugs, n.e.c.....	182	6.4	84	3.1
2274	374	Hard-surface floor coverings.....	19	8.9	17	7.0
2281		Fur-felt hats and hat bodies.....	130	11.5	158	14.5
	381	Hat bodies and hats, fur-felt.....			43	9.9
	385*	Hat finishing (see 2282, 2283).....			116	4.6
2282		Wool-felt hats and hat bodies.....	49	4.0	22	4.6
	382	Hat bodies and hats, wool-felt.....			12	4.4
	385*	Hat finishing (see 2281, 2283).....			10	.2
2283		Straw hats.....	40	2.1	37	2.7
	383	Hats, straw.....			11	.5
	385*	Hat finishing (see 2281, 2282).....			26	2.2
2284	384	Hatters' fur.....	46	1.3	37	1.9
2291	390	Felt goods, n.e.c.....	46	4.2	37	3.3
2292	391	Lace goods.....	98	7.0	63	7.3
2293	392	Paddings and upholstery filling.....	138	7.4	124	4.5
2294		Processed textile waste.....	179	5.1	153	4.8
	393	Processed textile waste—regular factories or jobbers.....			126	4.2
	394	Processed textile waste—contract factories.....			27	.6
2295		Coated fabrics, except rubberized.....	110	6.9	92	5.9
	362*	Miscellaneous special finishing (see 2399).....			56	1.9
	395	Artificial leather and oilcloth.....			36	4.0
2297		Jute (except felt), and linen goods.....	35	4.8	31	5.3
	397	Linen goods.....			9	1.7
	398	Jute goods (except felt).....			22	8.6
2298		Cordage and twine.....	148	14.1	124	12.6
	311*	Cotton broad-woven goods [fish netting] (see 2233).....			8	.5
	399	Cordage and twine.....			116	12.1
2299	(*)	Textile goods, n.e.c.....	25	2.3	(*)	(*)
MAJOR GROUP 23—APPAREL AND RELATED PRODUCTS						
2311		Men's and boys' suits and coats.....	1,810	132.9	1,848	116.9
	411*	Men's and boys' suits and coats—inside factories or jobbers (see 2312, 2327).....			1,146	82.4
	412*	Men's and boys' suits and coats—contract factories (see 2312, 2327).....			702	34.5
2312		Suit and coat findings.....	153	3.3	112	2.7
	411*	Men's and boys' suits and coats—inside factories or jobbers (see 2311, 2327).....			64	1.8
	412*	Men's and boys' suits and coats—contract factories (see 2311, 2327).....			48	.9
2321		Men's dress shirts and nightwear.....	1,065	88.2	590	70.5
	413	Men's and boys' shirts and nightwear—inside factories or jobbers.....			449	57.1
	414	Men's and boys' shirts and nightwear—contract factories.....			141	13.4
2322		Men's and boys' underwear.....	103	6.9	54	6.5
	415	Men's and boys' underwear—inside factories or jobbers.....			44	5.3
	416	Men's and boys' underwear—contract factories.....			10	1.2
2323		Men's and boys' neckwear.....	413	9.2	381	9.6
	423	Men's neckwear—inside factories or jobbers.....			347	8.7
	424	Men's neckwear—contract factories.....			34	.9
2325	425	Men's and boys' cloth hats and caps.....	313	5.1	270	[3.4
2326	426	Hat and cap materials.....	70	.9	55	.8
2327		Separate trousers.....	976	44.9	650	31.3
	411*	Men's and boys' suits and coats—inside factories or jobbers (see 2311, 2312).....			164	4.5
	412*	Men's and boys' suits and coats—contract factories (see 2311, 2312).....			318	12.9
	427*	Trousers and washable service apparel (see 2329).....			187	13.9
2328	428	Work shirts.....	85	11.2	87	13.4
2329		Men's and boys' clothing, n.e.c.....	1,001	68.0	779	60.7
	427*	Trousers and washable service apparel [wash suits, service apparel] (see 2327).....			108	5.4
	429*	Men's and boys' clothing, n.e.c. (see 2389).....			671	55.3

See footnotes at end of table.

INDUSTRY CLASSIFICATION			1947		1939	
1947 Code	1939 Code	TITLE	Number of estab- lishments	Production workers	Number of estab- lishments	Production workers
MAJOR GROUP 23—APPAREL AND RELATED PRODUCTS—Continued						
2331		Blouses and waists.....	1,361	29.9	302	9.7
	430	Blouses and waists—inside factories or jobbers.....			170	4.6
	431	Blouses and waists—contract factories.....			132	5.1
2333		Dresses, unit price.....	4,202	118.3	2,916	103.7
	432	Dresses, except house dresses—inside factories or jobbers.....			1,426	54.0
	433	Dresses, except house dresses—contract factories.....			1,490	49.7
2334		Dresses, dozen price.....	917	43.9	742	38.8
	434	House dresses, uniforms, and aprons—inside factories or jobbers.....			487	27.8
	435	House dresses, uniforms, and aprons—contract factories.....			255	11.0
2335		Women's suits and coats.....	2,477	65.4	1,753	41.0
	436*	Women's coats, suits, and skirts—inside factories or jobbers (see 2336).....			1,005	21.4
	437*	Women's coats, suits, and skirts—contract factories (see 2336).....			748	19.6
2336		Women's skirts.....	493	7.4	213	4.4
	436*	Women's coats, suits, and skirts—inside factories or jobbers (see 2335).....			115	2.7
	437*	Women's coats, suits, and skirts—contract factories (see 2335).....			98	1.7
2338	449	Women's neckwear and scarfs.....	166	2.2	107	1.9
2339		Women's outerwear, n.e.c.....	469	11.9	306	9.3
	438*	Women's and misses' clothing, n.e.c.—inside factories or jobbers [excludes academic religious vestments] (see 2389).....			204	5.5
	439	Women's and misses' clothing, n.e.c.—contract factories ¹			102	3.8
2341		Women's and children's underwear.....	1,516	52.0	759	39.9
	441	Women's and children's underwear of knitted fabric.....			139	6.4
	442	Women's and children's underwear of woven cotton fabric.....			174	11.4
	443	Women's and children's underwear of silk and rayon woven fabric.....			372	20.5
	485*	Robes and dressing gowns [negligees] (see 2384).....			74	1.6
2342	445	Corsets and allied garments.....	535	31.9	272	18.8
2351		Millinery.....	932	18.1	1,026	24.0
	451*	Millinery [excludes hat trimmings] (see 2393).....			1,026	24.0
2361		Children's dresses.....	664	20.3	296	15.1
	401	Children's dresses—inside factories or jobbers.....			182	10.6
	402	Children's dresses—contract factories.....			114	4.5
2363		Children's coats.....	506	11.0	156	3.5
	403	Children's coats—inside factories or jobbers ¹			111	2.3
	404	Children's coats—contract factories.....			45	1.2
2369		Children's outerwear, n.e.c.....	517	12.0	168	6.7
	465	Children's wear, n.e.c.—inside factories or jobbers ¹			137	5.3
	466	Children's wear, n.e.c.—contract factories ¹			31	1.4
2371	470	Fur goods.....	2,229	13.7	2,175	13.1
2381	481	Fabric and combination dress gloves ¹	130	4.8	51	3.9
2382	480	Fabric and combination work gloves.....	144	10.4	94	8.9
2383	484	Suspenders and garters.....	64	1.4	66	2.6
2384		Robes and dressing gowns.....	376	9.8	190	5.8
	485*	Robes and dressing gowns [excludes negligees] (see 2341).....			190	5.8
2385	486	Waterproof outer garments ¹	247	7.3	81	2.4
2386	487	Leather and sheep-lined clothing.....	126	3.8	97	4.7
2387	446	Belts.....	396	7.6	245	4.2
2388		Handkerchiefs.....	159	4.1	80	4.8
	482	Handkerchiefs—inside factories or jobbers.....			60	3.7
	483	Handkerchiefs—contract factories.....			20	1.1
2389		Apparel, n.e.c.....	85	1.8	47	1.0
	429*	Men's and boys' clothing, n.e.c. [academic, religious vestments] (see 2329) ¹			33	.6
	438*	Women's and misses' clothing, n.e.c.—inside factories or jobbers [academic, religious vestments] (see 2339).....			14	.4
		397	6.9	327	7.7
2391		Curtains and draperies.....			259	6.8
	494*	Curtains, draperies, etc.—regular factories or jobbers [excludes bedspreads] (see 2392) ¹			68	.9
	495*	Curtains, draperies, etc.—contract factories [excludes bedspreads] (see 2392) ¹	1,233	36.4	584	20.1
2392		Housefurnishings, n.e.c.....			103	9.0
	494*	Curtains, draperies, etc.—regular factories or jobbers [bedspreads] (see 2391).....			7	.2
	495*	Curtains, draperies, etc.—contract factories [bedspreads] (see 2391).....			474	10.9
	496	Housefurnishings, n.e.c. ¹				

See footnotes at end of table.

INDUSTRY CLASSIFICATION			1947		1939	
1947 Code	1939 Code	TITLE	Number of establishments	Production workers	Number of establishments	Production workers
MAJOR GROUP 23—APPAREL AND RELATED PRODUCTS—Continued						
2393	497	Textile bags.....	233	12.2	216	12.0
2394	498	Canvas products.....	902	8.6	334	3.9
2395		Tucking, pleating, and hemstitching.....	531	5.5	273	4.3
	493*	Trimmings and art goods—contract factories (see 2396) ¹			273	4.3
2396		Trimmings and art goods.....	787	13.1	383	5.5
	451*	Millinery [hat trimmings] (see 2351).....			24	.3
	492	Trimmings and art goods—regular factories or jobbers ¹			229	3.8
	493*	Trimmings and art goods—contract factories (see 2395).....			130	1.4
2397	488	Schiffli-machine embroideries.....	546	5.1	308	[3.8
2398		Embroideries, except Schiffli-machine.....	787	9.3	411	4.8
	490	Embroideries, except Schiffli-machine—regular factories or jobbers.....			54	.6
	491	Embroideries, except Schiffli-machine—contract factories.....			357	4.2
2399		Fabricated textile products, n.e.c.....	838	16.1	372	6.9
	362*	Miscellaneous special finishing (see 2295) ¹			57	.9
	499	Miscellaneous fabricated textile products, n.e.c. ¹			315	6.0
MAJOR GROUP 24—LUMBER AND PRODUCTS, EXCEPT FURNITURE						
2421		Sawmills and planing mills, general.....	19,039	363.7	7,320	248.3
	520*	Sawmills, veneer and cooperage stock mills (see mainly 2422-2424, 2444).....			6,562	229.2
	531*	Planing mills (see 2431, 2433, 2499).....			758	19.1
2422		Veneer mills.....	156	9.7	139	7.8
	520*	Sawmills, veneer and cooperage stock mills (see mainly 2421, 2423, 2424, 2444).....			139	7.8
2423		Shingle mills.....	184	2.4	226	3.8
	520*	Sawmills, veneer and cooperage stock mills (see mainly 2421, 2422, 2424, 2444).....			226	3.8
2424		Cooperage stock mills.....	250	11.7	320	8.5
	520*	Sawmills, veneer and cooperage stock mills (see mainly 2421, 2423, 2444).....			320	8.5
2425	691	Excelsior mills.....	(⁹) 56	(⁹) 1.1	(⁹) 53	(⁹) .9
2429	(⁹)	Special-product sawmills, n.e.c.....				
2431		Millwork plants.....	2,312	50.3	2,260	41.5
	520*	Sawmills, veneer and cooperage stock mills (see mainly 2421-2424, 2444).....			6	.3
	531*	Planing mills (see 2421, 2433, 2499) ¹			2,254	41.2
2432		Plywood plants.....	162	24.4	98	13.2
	520*	Sawmills, veneer and cooperage stock mills (see mainly 2421-2424, 2444).....			11	3.4
	532	Plywood mills ¹			87	9.8
2433		Prefabricated wood products.....	207	8.5	48	1.7
	520*	Sawmills, veneer and cooperage stock mills (see mainly 2421-2424, 2444).....			1	1.7
	531*	Planing mills (see 2421, 2431, 2499) ¹			47	
2441		Fruit and vegetable baskets.....	141	8.8	161	9.1
	520*	Sawmills, veneer and cooperage stock mills (see mainly 2421-2424, 2444).....			8	1.0
	651	Baskets for fruits and vegetables.....			153	8.1
2442	652	Rattan and willow ware, n.e.c.....	53	1.0	47	1.4
2443	653	Cigar boxes.....	42	1.7	59	3.1
2444		Wooden boxes (except cigar boxes).....	1,025	44.6	762	36.8
	520*	Sawmills, veneer and cooperage stock mills (see mainly 2421-2424).....			117	11.0
	654	Wooden boxes (except cigar boxes) ¹			645	25.8
2445	655	Cooperage.....	255	8.6	350	7.2
2491	694	Wood preserving.....	242	14.8	218	11.2
2492	695	Lasts and related products.....	50	1.7	48	1.5
2493	696	Mirror and picture frames.....	246	3.3	182	3.2
2499		Wood products, n.e.c.....	1,811	39.7	917	23.7
	531*	Planing mills [battery separators] (see 2421, 2431, 2433).....			10	.4
	699	Wood products, n.e.c.....			886	22.0
	1461*	Plumbers' supplies [toilet seats] (see 3431, 3439, 3591).....			21	1.3
MAJOR GROUP 25—FURNITURE AND FIXTURES						
2511		Wood house furniture, except upholstered.....	2,251	120.7	1,273	83.9
	619*	Household furniture, except upholstered (see 2512-2514) ¹			1,273	83.9
2512		Household furniture, upholstered.....	1,391	39.8	977	32.2
	612*	Upholstered household furniture (see 2513).....			828	29.5
	619*	Household furniture, except upholstered [wood frames] (see 2511, 2513, 2514).....			149	2.7
2513		Reed and rattan furniture.....	29	.7	55	1.0
	612*	Upholstered household furniture (see 2512).....			18	.1
	619*	Household furniture, except upholstered (see 2511, 2512, 2514).....			37	.9

See footnotes at end of table.

INDUSTRY CLASSIFICATION			1947		1939	
1947 Code	1939 Code	TITLE	Number of estab- lishments	Production workers	Number of estab- lishments	Production workers
MAJOR GROUP 25—FURNITURE AND FIXTURES—Continued						
2514		Metal house furniture, except upholstered	309	16.7	138	7.6
	619*	Household furniture, except upholstered (see 2511-2513) ⁴			138	7.6
2515	611	Mattresses and bedsprings	879	25.5	947	18.3
2519	(⁵)	Household furniture, n.e.c.	21	.8	(⁵)	(⁵)
2521		Wood office furniture	115	5.9	64	4.0
	620*	Office furniture (see 2522)			64	4.0
2522		Metal office furniture	103	12.1	63	7.2
	620*	Office furniture (see 2521)			63	7.2
2531	631	Public-building furniture	118	7.4	106	5.9
2532	632	Professional furniture ⁴	77	4.5	73	2.8
2541		Partitions and fixtures	1,134	23.8	767	14.9
	641	Partitions, shelving, etc. ⁴			754	14.6
	1482*	Doors, window sash, etc. [metal partitions] (see 3442)			13	.3
2561	661	Window and door screens	284	7.8	162	2.8
2562	662	Window shades	126	5.5	273	2.3
2563	663	Venetian blinds ⁴	643	8.3	280	5.4
2591	(¹⁰)	Restaurant furniture	173	2.9	(¹⁰)	(¹⁰)
2599	(⁹)	Furniture and fixtures, n.e.c.	29	.7	(⁹)	(⁹)
MAJOR GROUP 26—PAPER AND ALLIED PRODUCTS						
2611	711	Pulp mills	226	45.4	194	26.9
2612		Paper and board mills	665	128.7	650	115.2
	720	Paper and board mills			638	110.6
	1374*	Wallboard and wall plaster, etc. [fiber and insulating board] (see mainly 2699, 3292)			12	4.6
2641	740	Paper coating and glazing	182	15.2	140	7.5
2651	751	Envelopes	164	11.5	169	8.7
2661	760	Paper bags	193	19.6	119	11.1
2671	779	Paperboard boxes	1,522	94.6	1,338	62.5
2674	774	Fiber cans, tubes, drums, etc.	130	8.2	116	6.6
2691	791	Die-cut paper and board	205	7.0	121	4.4
2693	793	Wall paper	68	4.8	46	4.1
2694	794	Pulp goods, pressed and molded	19	1.5	14	.7
			739	52.4	421	22.6
2699		Converted paper products, n.e.c.			388	22.0
	799	Converted paper products, n.e.c. ⁴			33	.6
	1374*	Wallboard and wall plaster, etc. [cellular fiber insulations, etc.] (see mainly 2612, 3292)				
MAJOR GROUP 27—PRINTING, PUBLISHING, AND ALLIED INDUSTRIES						
			8,339	118.1	7,278	96.7
2711		Newspapers			429	.2
	811*	Newspapers: publishing without printing (see 2721)			6,849	96.5
	812*	Newspapers: publishing and printing (see mainly 2721, 2731) ⁴	2,166	19.3	2,337	15.4
2721		Periodicals			2	.4
	811*	Newspapers: publishing without printing (see 2711)			16	.4
	812*	Newspapers: publishing and printing (see mainly 2711, 2731)			1,904	.4
	821*	Periodicals: publishing without printing (see 2731, 2741)			415	14.6
	822*	Periodicals: publishing and printing (see mainly 2731, 2732, 2751)	648	8.1	554	6.2
2731		Books, publishing and printing			4	.1
	812*	Newspapers: publishing and printing (see mainly 2711, 2721)			50	(⁷)
	821*	Periodicals: publishing without printing (see 2731, 2741)			18	1.4
	822*	Periodicals: publishing and printing (see mainly 2721, 2732, 2751)			405	.1
	831*	Books: publishing without printing [excludes directories, atlases, and maps] (see 2741)			77	4.6
	832*	Books: publishing and printing (see mainly 2732, 2741, 2751) ⁴	156	9.3	199	7.6
2732		Book printing			4	(⁷)
	812*	Newspapers: publishing and printing (see mainly 2711, 2721, 2731)			3	.2
	822*	Periodicals: publishing and printing (see mainly 2721, 2731, 2732, 2751)			5	.1
	832*	Books: publishing and printing (see mainly 2731, 2751)			187	7.3
	833*	Books: printing without publishing (see 2751, 2761)	611	3.4	175	.5
2741		Miscellaneous publishing			2	.1
	812*	Newspapers: publishing and printing (see mainly 2711, 2721, 2731)			4	
	821*	Periodicals: publishing without printing (see 2721, 2731)			3	
	822*	Periodicals: publishing and printing (see mainly 2721, 2731, 2732, 2751)			151	.1
	831*	Books: publishing without printing [directories, atlases, maps] (see mainly 2731, 2732, 2751)			15	.3
	832*	Books: publishing and printing [directories, atlases, maps] (see mainly 2731, 2732, 2751)	11,932	156.0	10,295	112.4
2751		Commercial printing			154	4.1
	822*	Periodicals: publishing and printing (see mainly 2721, 2731, 2732)			50	1.0
	832*	Books: publishing and printing (see mainly 2731, 2732, 2741)			471	8.7
	833*	Books: printing without publishing (see 2732, 2761)			9,596	96.0
	851	General commercial (job) printing ⁴			24	2.6
	871	Gravure				

See footnotes at end of table.

INDUSTRY CLASSIFICATION			1947		1939	
1947 Code	1939 Code	TITLE	Number of estab- lishments	Production workers	Number of estab- lishments	Production workers
MAJOR GROUP 27—PRINTING, PUBLISHING, AND ALLIED INDUSTRIES—Continued						
2761		Lithographing.....	1,413	41.2	789	26.9
	812*	Newspapers: publishing and printing (see mainly 2711, 2721, 2731).....			1	.3
	822*	Periodicals: publishing and printing (see mainly 2721, 2731, 2732, 2751).....			5	
	832*	Books: publishing and printing (see mainly 2731, 2732, 2741, 2751).....			2	
	833*	Books: printing without publishing (see 2732, 2751).....			32	
	861	Lithographing.....			740	26.9
2771	862	Greeting cards.....	162	12.7	109	7.5
2781		Bookbinding.....	686	20.0	620	14.8
	832*	Books: publishing and printing (see 2731, 2732, 2741, 2751).....			1	14.3
	880*	Bookbinding and related industries (see 2782, 2783, 2789).....			619	
2782		Blankbook making and paper ruling.....	305	7.0	247	5.1
	880*	Bookbinding and related industries (see 2781, 2783, 2789).....			247	5.1
2783		Loose-leaf binders and devices.....	131	6.4	132	4.0
	812*	Newspapers: publishing and printing (see 2711, 2721, 2731).....			2	4.0
	832*	Books: publishing and printing (see 2731, 2732, 2741, 2751).....			1	
	880*	Bookbinding and related industries (see 2781, 2782, 2789).....			129	
2789		Miscellaneous bookbinding work.....	220	2.9	138	2.5
	880*	Bookbinding and related industries (see 2781-2783).....			138	2.5
2791	891	Typesetting.....	794	9.3	641	6.2
2792	892	Engraving and plate printing.....	416	6.5	436	5.4
2793	893	Photoengraving.....	770	12.2	694	9.2
2794	894	Electrotyping and stereotyping.....	237	5.6	234	4.4
MAJOR GROUP 28—CHEMICALS AND ALLIED PRODUCTS						
2812		Alkalies and chlorine.....	32	15.0	33	10.5
	999*	Chemicals, n.e.c. (see mainly 2819, 2829).....			33	10.5
2819		Inorganic chemicals, n.e.c.....	380	35.2	307	23.1
	999*	Chemicals, n.e.c. (see mainly 2812, 2829).....			307	23.1
2821		Cyclic (coal-tar) crudes.....	46	1.6	45	1.5
	981*	Coal-tar products, crude and intermediate (see 2829).....			45	1.5
2823		Plastics materials.....	125	22.2	41	7.2
	982	Plastics materials.....			38	7.0
	999*	Chemicals, n.e.c. [ester gum] (see mainly 2812, 2819, 2829).....			3	.2
2824	(*)	Synthetic rubber.....	20	5.7	(*)	(*)
2825	951	Synthetic fibers.....	38	57.9	30	48.3
2826	983	Explosives.....	70	8.9	80	7.2
2829		Organic chemicals, n.e.c.....	258	61.6	192	22.6
	912*	Colors and pigments [organic lakes, toners] (see 2852, 2853).....			27	.6
	981*	Coal-tar products, crude and intermediate [intermediate and synthetic dyes] (see 2821).....			5	.9
	999*	Chemicals, n.e.c. [synthetic dyes] (see mainly 2812, 2819).....			100	21.1
2831		Biological products.....	85	2.2	80	2.2
	931*	Drugs and medicines (see 2832-2834).....			80	2.2
2832		Botanical products.....	15	.5	17	.6
	931*	Drugs and medicines (see mainly 2831, 2833, 2834).....			17	.6
2833		Medicinal chemicals.....	92	9.4	20	1.8
	931*	Drugs and medicines (see mainly 2831, 2832, 2834).....			7	.1
	999*	Chemicals, n.e.c. (see mainly 2812, 2819, 2829).....			13	1.7
2834		Pharmaceutical preparations.....	1,163	42.6	1,000	19.6
	931*	Drugs and medicines (see 2831-2833).....			1,000	19.6
2841	941	Soap and glycerin.....	249	19.4	264	13.6
2842	989	Cleaning and polishing preparations.....	1,038	9.1	637	5.1
2843		Sulfonated oils and assistants.....	105	1.2	85	.8
	980*	Tanning materials and assistants (see 2865, 2899).....			85	.8
2851		Paints and varnishes.....	1,201	34.7	1,125	21.9
	911*	Paints, varnishes, and lacquers (see 2853).....			1,125	21.9
2852		Inorganic color pigments.....	94	10.3	59	5.5
	912*	Colors and pigments (see 2829, 2853).....			59	5.5
2853		Whiting and fillers.....	71	.8	41	.3
	911*	Paints and varnishes [putty, etc.] (see 2851).....			37	.2
	912*	Colors and pigments (see 2829, 2852).....			4	.1

See footnotes at end of table.

INDUSTRY CLASSIFICATION			1947		1939	
1947 Code	1939 Code	TITLE	Number of estab- lishments	Production workers	Number of estab- lishments	Production workers
MAJOR GROUP 28—CHEMICALS AND ALLIED PRODUCTS—Continued						
2861	961	Hardwood distillation.....	27	1.6	43	1.8
2862	962	Softwood distillation.....	32	4.1	25	2.4
2863	-----	Gum naval stores (steam distilled).....	31	.5	n.a.	n.a.
	963*	Gum naval stores.....	-----	-----	n.a.	n.a.
2865	-----	Natural tanning and dyeing materials.....	28	1.2	35	1.3
	980*	Tanning materials and assistants (see 2843, 2890).....	-----	-----	35	1.3
2871	-----	Fertilizers.....	187	17.4	171	11.0
	970*	Fertilizers (see 2872) 4.....	-----	-----	171	11.0
2872	-----	Fertilizers (mixing only).....	517	9.2	592	7.8
	970*	Fertilizers (see 2871) 4.....	-----	-----	592	7.8
2881	921	Cottonseed oil mills.....	315	12.1	447	15.2
2882	922	Linseed oil mills.....	17	1.3	25	2.1
2883	923	Soybean oil mills.....	133	5.1	47	1.5
2884	-----	Vegetable oil mills, n.e.c.....	84	4.3	38	.9
	920*	Vegetable and animal oils, n.e.c. (see 2889).....	-----	-----	38	.9
2885	925	Marine animal oils 4.....	59	1.8	81	1.6
2886	991	Grease and tallow.....	556	10.1	310	5.2
2887	-----	Fatty acids.....	16	1.0	9	.5
	990*	Chemicals, n.e.c. (see mainly 2812, 2819, 2829).....	-----	-----	9	.5
2889	-----	Animal oils, n.e.c.....	14	.1	5	(?)
	920*	Vegetable and animal oils, n.e.c. (see 2884).....	-----	-----	5	(?)
2891	-----	Printing ink.....	239	4.2	197	2.5
	987*	Printing ink [excludes stamping ink] (see 2899).....	-----	-----	197	2.5
2892	924	Essential oils 4.....	42	.9	15	.4
2893	932	Toilet preparations.....	718	18.2	539	10.4
2894	990	Glue and gelatin.....	72	4.3	80	3.0
2895	986	Carbon black.....	59	2.8	53	1.6
2896	985	Compressed and liquefied gases.....	371	6.1	379	4.0
2897	-----	Insecticides and fungicides.....	166	3.2	83	.7
	933*	Insecticides and related chemical compounds [insecticides and fungicides, except household] (see 2899) 4.....	-----	-----	83	.7
2898	984	Salt.....	38	4.1	40	3.7
2899	-----	Chemical products, n.e.c.....	1,174	14.4	814	5.5
	933*	Insecticides and related chemical compounds [household insecticides, insulating compounds, etc.] (see 2897) 4.....	-----	-----	674	4.0
	980*	Tanning materials and assistants [mordants, sizes] (see 2843, 2865).....	-----	-----	33	.6
	987*	Printing ink [stamping ink] (see 2891).....	-----	-----	7	(?)
	995	Bluing.....	-----	-----	13	.1
	996	Adhesives, n.e.c.....	-----	-----	64	.3
	997	Writing ink.....	-----	-----	15	.3
	999*	Chemicals, n.e.c. (see mainly 2812, 2819, 2829).....	-----	-----	8	.2
MAJOR GROUP 29—PRODUCTS OF PETROLEUM AND COAL						
2911	-----	Petroleum refining.....	437	113.8	518	73.0
	992*	Lubricating oils and greases [re-refining used oils] (see 2992).....	-----	-----	33	.2
	1011	Petroleum refining.....	-----	-----	485	72.8
2931	1031	Beehive coke ovens.....	78	2.9	29	.7
2932	1032	Byproduct coke ovens.....	89	31.5	83	21.0
2951	1051	Paving mixtures and blocks.....	263	2.0	231	2.4
2952	1052	Roofing felts and coatings 4.....	174	13.8	135	8.2
2991	1091	Fuel briquets and packaged fuel.....	99	1.0	32	.4
2992	-----	Lubricants, n.e.c.....	233	4.1	199	2.0
	992*	Lubricating oils and greases [excludes re-refining of used oils] (see 2911).....	-----	-----	199	2.0
2999	(?)	Petroleum and coal products, n.e.c.....	14	.4	(?)	(?)
MAJOR GROUP 30—RUBBER PRODUCTS						
3011	1111	Tires and inner tubes.....	57	93.9	53	54.1
3021	1121	Rubber footwear.....	26	24.0	13	14.9
3031	1191	Reclaimed rubber.....	15	1.9	10	1.1
3099	1199	Rubber industries, n.e.c.....	777	94.8	519	50.7

See footnotes at end of table.

INDUSTRY CLASSIFICATION			1947		1939	
1947 Code	1939 Code	TITLE	Number of estab-lishments	Production workers	Number of estab-lishments	Production workers
MAJOR GROUP 31—LEATHER AND LEATHER PRODUCTS						
3111		Leather tanning and finishing.....	561	48.6	446	47.3
	1211	Leather tanning and finishing—regular factories or jobbers.....			335	41.8
	1212	Leather tanning and finishing—contract factories.....			111	5.5
3121	1221	Industrial leather belting.....	183	4.0	190	2.3
3131	1230	Footwear cut stock.....	606	19.7	520	18.8
3141		Footwear, except rubber.....	1,288	210.6	930	207.8
	1240*	Footwear, except rubber [excludes house slippers] (see 3142).....			930	207.8
3142		House slippers.....	212	10.0	139	10.2
	1240*	Footwear, except rubber (see 3141).....			139	10.2
3151		Leather dress gloves.....	252	8.2	166	7.7
	1250*	Leather gloves and mittens (see 3152).....			166	7.7
3152		Leather work gloves.....	89	2.3	65	1.8
	1250*	Leather gloves and mittens (see 3151).....			65	1.8
3161	1260	Luggage.....	592	13.9	329	8.3
3171	1271	Handbags and purses.....	734	18.4	286	14.0
3172	1272	Small leather goods.....	246	4.8	118	3.6
3192	1291	Saddlery, harness, and whips.....	140	2.5	156	2.8
3199	1299	Leather goods, n.e.c.....	405	5.4	190	2.5
MAJOR GROUP 32—STONE, CLAY, AND GLASS PRODUCTS						
3211	1310	Flat glass.....	34	24.3	37	16.7
3221	1321	Glass containers.....	87	41.9	77	25.8
3229	1329	Pressed and blown glassware, n.e.c.....	126	37.5	115	27.3
3231	1330	Products of purchased glass.....	1,054	19.3	557	10.0
3241		Cement, hydraulic.....	155	30.6	160	20.2
	1340*	Cement [excludes quarry departments of combined quarrying and processing plants] (see n.m.).....			160	20.2
3251	1351	Brick and hollow tile.....	674	27.0	800	29.1
3253	1354	Floor and wall tile.....	37	6.3	49	5.7
3254	1355	Sewer pipe.....	69	8.3	65	6.4
3255	1356	Clay refractories.....	169	16.0	165	12.2
3259		Structural clay products, n.e.c.....	161	5.2	127	3.4
	1352	Terra cotta.....			12	1.1
	1353	Roofing tile.....			16	.6
	1359	Clay products, n.e.c.....			99	1.7
3261	1361	Vitreous plumbing fixtures.....	33	7.0	25	4.5
3262	1362	Vitreous-china food utensils.....	27	10.3	17	4.4
3263	1363	Earthenware food utensils.....	76	15.7	31	11.7
3264	1364	Porcelain electrical supplies.....	60	10.4	42	6.0
3265	1365	China decorating for the trade.....	65	.9	24	.4
3269	1369	Pottery products, n.e.c.....	491	0.0	151	0.1
			6,158	41.5	1,892	15.6
3271		Concrete products.....				
	1371*	Concrete products [excludes ready-mixed concrete] (see n.m.).....			1,892	15.6
3272	1372	Gypsum products.....	73	6.5	68	4.9
3274		Lime.....	172	6.1	316	6.7
	1374*	Wallboard and wall plaster, etc. [lime plaster] (see mainly 2613, 2699, 3292).....			42	.3
	1375*	Lime [excludes quarry departments of combined quarrying and processing plants] (see n.m.).....			269	6.2
	1397*	Nonclay refractories [dead-burned dolomite] (see 3297).....			5	.2
3275		Mineral wool.....	91	7.4	49	1.8
	1373*	Mineral wool [excludes exfoliated vermiculite] (see 3299).....			49	1.8
3281		Cut-stone and stone products.....	640	8.3	1,092	11.8
	1380*	Cut-stone and stone products [from purchased stone] (see n.m.).....			1,092	11.8
3291	1391	Abrasive products.....	253	15.9	124	7.7
3292		Asbestos products.....	111	18.1	85	10.4
	1374*	Wallboard and wall plaster, etc. [asphalt floor tile] (see mainly 2612, 2699).....			6	.4
	1392	Asbestos products.....			79	10.0
3293	1393	Gaskets and asbestos insulations.....	191	10.7	134	5.9
3294	1394	Graphite: ground or blended.....	12	.6	6	.1
3295		Minerals: ground or treated.....	206	6.7	223	5.2
	1395*	Minerals: ground or treated [excludes mica laminates, etc.] (see 3299, 3661).....			223	5.2
3296	1396	Sand-lime products.....	26	.3	27	.3
3297		Nonclay refractories.....	63	9.0	41	4.5
	1397*	Nonclay refractories [excludes dead-burned dolomite] (see 3274).....			41	4.5
3298	1398	Statuary and art goods.....	272	1.8	126	1.0

See footnotes at end of table.

INDUSTRY CLASSIFICATION			1947		1939	
1947 Code	1939 Code	TITLE	Number of establishments	Production workers	Number of establishments	Production workers
MAJOR GROUP 32—STONE, CLAY, AND GLASS PRODUCTS—Continued						
3290		Nonmetallic mineral products, n.e.c.	74	3.0	53	1.2
	1373*	Mineral wool [exfoliated vermiculite] (see 3275)			9	(?)
	1374*	Wallboard and wall plaster, etc. [stucco, except lime and gypsum; magnesite floor composition] (see mainly 2812, 2899, 3292)			28	.1
	1395*	Minerals: ground or treated [mica products, except radio parts] (see 3295, 3661)			11	.6
	1611*	Wiring devices and supplies [mica electrical insulators] (see 3611)			5	.6
MAJOR GROUP 33—PRIMARY METAL INDUSTRIES						
3311	1411	Blast furnaces	86	32.7	81	19.5
3312	1412	Steel works and rolling mills	215	438.1	253	368.9
3313		Electrometallurgical products	19	8.2	18	2.6
	999*	Chemicals, n.e.c. (see mainly 2812, 2819, 2829)			18	2.8
3321		Gray-iron foundries	1,654	157.4	1,254	75.7
	1421	Gray-iron castings ¹			1,180	59.2
	1424	Cast-iron pipe and fittings			74	16.5
3322	1422	Malleable-iron foundries	78	25.7	83	18.0
3323	1423	Steel foundries	204	55.3	164	30.1
3331		Primary copper	27	13.1		
3332		Primary lead	16	4.0		
3333		Primary zinc	20	11.1		
3334		Primary aluminum	11	7.3		
3339		Primary nonferrous metals, n.e.c.	14	1.9		
	1510	Primary nonferrous metals (equivalent to 1947 census industries 3331-3334, 3339)			63	27.6
3341		Secondary nonferrous metals	322	14.8	280	8.1
	1520*	Rolling and drawing nonferrous metals, except aluminum (see 3351, 3359) ¹			101	3.4
	1531	Secondary precious metals			65	1.1
	1532	Secondary nonferrous metals, n.e.c. ¹			113	3.6
3351		Copper rolling and drawing	78	45.9	57	33.6
	1520*	Rolling and drawing nonferrous metals, except aluminum (see 3341, 3359) ¹			57	33.6
3352		Aluminum rolling and drawing	29	22.8	13	9.9
	1503*	Aluminum products, n.e.c. (see mainly 3361, 3463)			13	9.9
3359		Nonferrous metal rolling, n.e.c.	55	6.1	31	2.6
	1520*	Rolling and drawing nonferrous metals, except aluminum (see 3341, 3351)			31	2.6
3361		Nonferrous foundries	1,724	57.5	776	23.4
	1501*	Nonferrous foundries, except aluminum (see 3566) ¹			589	9.0
	1502*	Aluminumware, n.e.c. [cast aluminumware] (see 3463)			6	1.2
	1503*	Aluminum products, n.e.c. [castings, die castings] (see mainly 3352, 3463)			95	5.3
	1509*	Nonferrous metal products, n.e.c. [die castings] (see mainly 3463, 3566, 3591)			86	7.9
	1599*	Nonferrous metal products, n.e.c. [die castings] (see mainly 3463, 3566, 3591)				
3391		Iron and steel forgings	250	32.4	192	14.8
	1492*	Iron and steel forgings [excludes railroad track accessories, not forged] (see 3499)			192	14.8
3392	1441	Wire drawing	134	45.6	95	22.0
3393	1493	Welded and heavy-riveted pipe	50	11.3	49	8.4
3399		Primary metal industries, n.e.c.	377	18.1	103	6.9
	1409	Cold-rolled steel sheets and strip, cold-finished bars			43	5.6
	1503*	Aluminum products, n.e.c. [forgings] (see mainly 3352, 3361, 3463)			5	.1
	1509*	Nonferrous metal products, n.e.c. [forgings] (see mainly 3361, 3463, 3566, 3591)			13	.5
	1708*	Machine-shop products, n.e.c. [heat treating of metals] (see mainly 3569, 3591, 3599)			42	.7
MAJOR GROUP 34—FABRICATED METAL PRODUCTS						
3411		Tin cans and other tinware	217	40.9	195	29.3
	1430*	Tin cans and other tinware, n.e.c. (see 3463) ¹			195	29.3
3421		Outlery	195	17.6	124	10.3
	1451*	Outlery and edge tools (see mainly 3422, 3621) ¹			124	10.3
3422		Edge tools	238	7.6	163	4.9
	1451*	Outlery and edge tools (see mainly 3421, 3621) ¹			140	4.3
	1708*	Machine-shop products, n.e.c. [machine knives, except metal cutting] (see mainly 3569, 3591, 3599)			23	.6
3423		Hand tools, n.e.c.	579	30.1	354	14.7
	1452*	Hand tools, n.e.c. [excludes blow torches and caulking guns] (see 3599) ¹			354	14.7
3424	1453	Files	37	4.1	22	3.2
3425	1454	Hand saws and saw blades	89	7.4	87	4.1
3429		Hardware, n.e.c.	728	64.8	462	38.0
	1459	Hardware, n.e.c. ¹			442	37.5
	1509*	Nonferrous metal products, n.e.c. [lawn sprinklers] (see mainly 3361, 3463, 3566, 3591)			7	.2
	1708*	Machine-shop products, n.e.c. [tackle blocks] (see mainly 3569, 3591, 3599)			13	.3

See footnotes at end of table.

INDUSTRY CLASSIFICATION			1947		1939	
1947 Code	1939 Code	TITLE	Number of establishments	Production workers	Number of establishments	Production workers
MAJOR GROUP 34—FABRICATED METAL PRODUCTS—Continued						
3431		Metal plumbing fixtures and fittings.....	277	30.1	247	22.9
	1461*	Plumbers' supplies (see 2499, 3439, 3591)			247	22.9
3432	1462	Oil burners	161	4.0	133	1.6
3439		Heating and cooking apparatus, n.e.c.....	848	92.0	656	53.9
	1461*	Plumbers' supplies [range boilers] (see 2499, 3431, 3591)			22	1.5
	1464	Steam and hot-water heating apparatus.....			68	8.5
	1465	Stoves, ranges, water heaters, etc.			454	41.8
	1469*	Heating and cooking apparatus, except electric, n.e.c. (see 3522) ..			112	2.1
3441		Structural and ornamental products.....	1,667	64.3	1,171	36.8
	1481	Fabricated structural steel and ornamental metal work			1,109	30.8
	1593*	Aluminum products, n.e.c. [ornamental work] (see mainly 3352, 3361, 3463) ..			2	
3442		Metal doors, sash, and trim.....	320	17.4	188	7.4
	1482*	Doors, window sash, etc. (see 2541)			188	7.4
3443	1463	Boiler shop products	812	55.9	478	20.5
3444	1597	Sheet-metal work.....	1,708	35.1	1,262	18.7
3461	1471	Vitreous-enameled products.....	49	11.1	55	10.8
3463		Metal stampings.....	1,981	114.0	965	57.2
	1430*	Tin cans and other tinware, n.e.c. [household, hospital utensils] (see 3411) ..			54	2.5
	1472	Automobile stampings.....			90	8.6
	1473	Stamped and pressed metal products, except automobile			692	38.0
	1592*	Aluminum ware, n.e.c. (see 3361)			25	5.1
	1593*	Aluminum products, n.e.c. (see mainly 3352, 3351)			0	1.1
	1599*	Nonferrous metal products, n.e.c. [spunware] (see mainly 3361, 3566, 3591) ..			95	1.3
3465	1474	Enameling and lacquering.....	261	3.7	80	1.8
3466	1475	Galvanizing.....	125	2.7	83	1.2
3467	1571	Engraving on metal.....	219	2.9	94	1.4
3468	1572	Plating and polishing.....	1,802	25.0	643	8.2
3471	1580	Lighting fixtures.....	1,206	39.9	568	20.5
3481	1442	Nails and spikes.....	68	3.3	36	2.5
3489	1449	Wirework, n.e.c.....	909	49.3	669	30.4
3491	1496	Metal barrels, drums, and pails.....	70	9.3	64	6.1
3492	1498	Safes and vaults.....	26	3.0	16	1.2
3493	1494	Steel springs.....	81	6.7	53	2.9
3494		Bolts, nuts, washers, and rivets.....	364	40.9	219	20.7
	1491	Bolts, nuts, washers, and rivets.....			155	14.3
	1495*	Screw-machine products and wood screws [wood screws] (see 3495) ..			64	6.4
3495		Screw-machine products.....	1,207	24.7	288	10.6
	1495*	Screw-machine products and wood screws [excludes wood screws] (see 3494) ..			288	10.6
3496	1594	Collapsible tubes.....	19	3.5	14	1.9
3497		Metal foil.....	43	3.7	39	2.3
	1595	Gold and silver leaf and foil.....			20	.6
	1596	Foils, n.e.c.			13	1.7
3499		Fabricated metal products, n.e.c.....	438	6.4	104	5.1
	1492*	Iron and steel forgings [railroad track accessories, not forged] (see 3391) ..			15	.6
	1593*	Aluminum products, n.e.c. [novelties] (see mainly 3352, 3361)			10	.5
	1599*	Nonferrous metal products, n.e.c. [novelties] (see mainly 3361, 3463, 3566, 3591) ..			79	4.0
MAJOR GROUP 35—MACHINERY (EXCEPT ELECTRICAL)						
3511		Steam engines and turbines.....	17	15.4	20	4.1
	1619*	Electrical industrial apparatus, n.e.c. [turbo generators and water-wheel generator sets] (see 3567, 3614-3617, 3619) ..			2	4.1
	1711	Steam engines and turbines.....			18	
3519	1712	Internal-combustion engines.....	134	56.5	74	14.8
3521		Tractors.....	94	62.9	28	30.9
	1721*	Tractors [excludes industrial tractors] (see 3565) ..			28	30.9
3522		Farm machinery, except tractors.....	1,008	70.7	393	20.2
	1751*	Food-products machinery [milk machines, farm milk separators] (see 3551) ..			8	.2
	1461*	Cutlery and edge tools [animal hair clippers] (see mainly 3421, 3422, 3621) ..			1	
	1469*	Heating and cooking apparatus, except electrical, n.e.c. [brooders] (see 3439) ..			25	.8
	1729	Agricultural machinery, except tractors			322	27.8
	1768*	Machine-shop products, n.e.c. [barn and stable equipment] (see mainly 3569, 3591, 3599) ..			37	.4
3531		Construction and mining machinery.....	517	66.2	323	24.1
	1731*	Construction machinery [excludes overhead traveling cranes] (see 3563) ..			218	17.2
	1733	Mining machinery and equipment			66	5.1
	1769*	Industrial machinery, n.e.c. [pneumatic portable construction tools] (see mainly 3559, 3569, 3589) ..			39	1.8
3532		Oil-field machinery and tools.....	230	22.7	239	12.6
	1732	Oil-field machinery and tools			239	12.4
	1769*	Industrial machinery, n.e.c. [water-well machinery] (see mainly 3531, 3559, 3569, 3589) ..			0	.2

See footnotes at end of table.

INDUSTRY CLASSIFICATION			1947		1939	
1947 Code	1939 Code	TITLE	Number of estab- lishments	Production workers	Number of estab- lishments	Production workers
MAJOR GROUP 35—MACHINERY (EXCEPT ELECTRICAL)—Continued						
3541	1741	Machine tools ¹	316	54.9	224	37.0
3542	-----	Metalworking machinery, n.e.c.	428	43.6	231	18.1
	1749	Metalworking machinery and equipment, n.e.c. ¹			224	17.8
	1753*	Woodworking machinery [portable electric woodworking tools] (see 3553).....			7	.3
3543	1742	Cutting tools, jigs, fixtures, etc. ¹	3,549	74.5	1,015	25.8
3551	-----	Food-products machinery.....	622	28.8	406	14.2
	1751*	Food-products machinery [excludes milking machines, farm milk separators] (see 3522) ¹			406	14.2
3552	1752	Textile machinery.....	489	45.4	339	22.6
3553	-----	Woodworking machinery.....	294	12.6	148	3.6
	1753*	Woodworking machinery [excludes portable electric woodworking tools] (see 3542) ¹			148	3.6
3554	1754	Paper-industries machinery ¹	149	13.4	116	5.6
3555	1755	Printing-trades machinery ¹	326	19.6	254	9.6
3559	-----	Special-industry machinery, n.e.c.	2,226	53.8	976	21.7
	1759	Special-industry machinery, n.e.c. ¹			253	11.7
	1769*	Industrial machinery, n.e.c. (see mainly 3531, 3569, 3589) ¹			152	5.6
	2092*	Models and patterns [patterns for industrial use] (see 3908).....			571	4.4
3561	1761	Pumps and compressors ¹	447	40.4	369	20.1
3562	-----	Elevators and escalators.....	111	7.3	101	3.6
	1762*	Elevators, escalators, and conveyors (see 3563) ¹			101	3.6
3563	-----	Conveyors.....	253	18.1	115	5.7
	1731*	Construction machinery [overhead traveling cranes] (see 3531).....			12	.8
	1762*	Elevators, escalators, and conveyors (see 3562) ¹			103	4.9
3564	1764	Blowers and fans ¹	192	11.1	89	4.1
3565	-----	Industrial trucks and tractors.....	197	10.7	70	3.7
	1721*	Tractors (see 3521).....			4	.6
	1763	Cars and trucks, industrial ¹			66	3.1
3566	-----	Power transmission equipment.....	416	44.0	250	18.2
	1591*	Nonferrous foundries [bearings] (see 3361).....			7	.6
	1599*	Nonferrous metal products, n.e.c. [bearings, except ball and roller] (see mainly 3361, 3463, 3591).....			38	4.9
	1766*	Mechanical power transmission equipment [excludes ball and roller bearings] (see 3593) ¹			161	11.7
	1768*	Machine-shop products, n.e.c. [bearings] (see mainly 3569, 3591, 3599).....			44	1.0
			108	4.0	60	1.3
3567	-----	Industrial furnaces and ovens.....				
	1619*	Electrical industrial apparatus, n.e.c. (see 3511, 3614, 3617, 3619).....			17	.4
	1768*	Machine-shop products, n.e.c. (see mainly 3569, 3591, 3599) ¹			43	.9
3568	1767	Mechanical stokers ¹	46	3.1	65	3.8
3569	-----	General industrial machinery, n.e.c.	421	25.6	261	12.4
	1599*	Nonferrous metal products, n.e.c. (see mainly 3361, 3463, 3566, 3591).....			4	.1
	1768*	Machine-shop products, n.e.c. [gas generators, sprinkler systems] (see mainly 3591, 3599).....			86	4.3
	1769*	Industrial machinery, n.e.c. (see mainly 3531, 3559, 3589) ¹			171	8.0
3571	-----	Computing and related machines.....	53	40.5	38	16.5
	1771*	Office and store machines, n.e.c. (see 3572, 3579) ¹			38	16.5
3572	-----	Typewriters.....	28	23.8	18	16.2
	1771*	Office and store machines, n.e.c. (see 3571, 3579) ¹			18	16.2
3576	1776	Scales and balances.....	75	4.9	56	2.8
3579	-----	Office and store machines, n.e.c.	201	15.2	139	7.4
	1541*	Watches and clocks [time stamps, etc.] (see 3371).....			11	.5
	1661*	Radios, radio tubes, and phonographs [dictating machines] (see 3661-3663).....			3	.8
	1771*	Office and store machines, n.e.c. (see 3571, 3572) ¹			71	3.4
	1772*	Coin-operated machines (see 3585) ¹			54	2.7
			65	23.7	42	7.5
3581	1781	Domestic laundry equipment.....	127	6.9	88	2.8
3582	1782	Laundry and dry-cleaning machinery ¹	70	12.6	39	7.8
3583	1783	Sewing machines.....				
			34	12.2	21	3.9
3584	-----	Vacuum cleaners.....				
	1620*	Electrical appliances [household vacuum cleaners] (see 3619, 3621).....			18	3.9
	1769*	Industrial machinery, n.e.c. [industrial vacuum cleaners] (see mainly 3531, 3559, 3569, 3589) ¹			3	(?)
			561	108.3	343	39.4
3585	-----	Refrigeration machinery.....				
	1768*	Machine-shop products, n.e.c. [air conditioning equipment] (see mainly 3569, 3591, 3599).....			30	2.1
	1772*	Coin-operated machines [coin-operated beverage dispensers] (see 3579).....			1	
	1784	Refrigeration machinery ¹			312	37.3
			52	8.9	38	5.1
3586	1760	Measuring and dispensing pumps.....				

See footnotes at end of table.

INDUSTRY CLASSIFICATION			1947		1939	
1947 Code	1939 Code	TITLE	Number of establishments	Production workers	Number of establishments	Production workers
MAJOR GROUP 35—MACHINERY (EXCEPT ELECTRICAL)—Continued						
3589		Service and household machines, n.e.c.	179	8.2	79	1.4
	1768*	Machine-shop products, n.e.c. [water softeners, etc.] (see mainly 3589, 3591, 3599)			41	.2
	1769*	Industrial machinery, n.e.c. (see mainly 3531, 3559, 3599)			38	1.2
3591		Valves and fittings, except plumbers'	453	65.9	208	32.2
	1461*	Plumbers' supplies (see 2499, 3431, 3439)			3	.2
	1466*	Steam fittings (see 3821) *			132	17.4
	1599*	Nonferrous metal products, n.e.c. (see mainly 3361, 3463, 3596) *			42	2.9
	1768*	Machine-shop products, n.e.c. (see mainly 3589, 3599)			121	11.7
3592		Fabricated pipe and fittings	212	8.3	112	2.8
	1599*	Nonferrous metal products, n.e.c. (see mainly 3361, 3463, 3596, 3591)			6	.1
	1768*	Machine-shop products, n.e.c. (see mainly 3589, 3591, 3599) *			106	2.7
3593		Ball and roller bearings	94	45.1	58	19.2
	1766*	Mechanical power-transmission equipment (see 3586) *			58	19.2
3599		Machine shops	3,112	48.6	1,325	24.3
	1452*	Hand tools, n.e.c. [blow torches and caulking guns] (see 3423)			5	(?)
	1593*	Aluminum products, n.e.c. [machined] (see mainly 3352, 3361, 3463)			13	.2
	1599*	Nonferrous metal products, n.e.c. (see mainly 3361, 3463, 3596, 3591)			29	.3
	1768*	Machine-shop products, n.e.c. (see mainly 3589, 3591) *			1,080	22.5
	1770*	Machine-shop repairs [machining contract work] (see n.m.)			198	1.8
MAJOR GROUP 36—ELECTRICAL MACHINERY, EQUIPMENT, AND SUPPLIES						
3611		Wiring devices and supplies	342	32.5	141	14.0
	1611*	Wiring devices and supplies [excludes mica electrical insulators] (see 3299)			141	14.0
3612	1612	Carbon and graphite products	44	6.4	31	3.2
3613	1613	Electrical measuring instruments	154	16.1	59	7.0
3614		Motors and generators	259	101.9	132	44.4
	1619*	Electrical industrial apparatus, n.e.c. (see 3511, 3567, 3615-3617, 3619) *			126	42.7
	1640*	Automotive electrical equipment [propulsion-type motors and generators] (see 3641)			6	1.7
3615		Transformers	144	28.2	47	9.3
	1619*	Electrical industrial apparatus, n.e.c. (see 3511, 3567, 3614, 3616, 3617, 3619) *			47	9.3
3616		Electrical control apparatus	324	54.6	217	14.7
	1619*	Electrical industrial apparatus, n.e.c. (see 3511, 3567, 3614, 3616, 3617, 3619)			217	14.7
3617		Electrical welding apparatus	108	5.1	47	1.7
	1619*	Electrical industrial apparatus, n.e.c. (see 3511, 3567, 3614-3616, 3619) *			47	1.7
3619		Electrical industrial apparatus, n.e.c.	195	8.9	39	.9
	1619*	Electrical industrial apparatus, n.e.c. (see 3511, 3567, 3614-3617) *			35	.9
	1620*	Electrical appliances [electric soldering irons] (see 3584, 3621)			4	(?)
3621		Electrical appliances	326	37.3	118	13.6
	1451*	Cutlery and edge tools [electric shavers] (see mainly 3421, 3422)			6	.5
	1620*	Electrical appliances [excludes household vacuum cleaners, electric soldering irons] (see 3584, 3619) *			112	13.1
3631	1630	Insulated wire and cable	171	18.2	79	15.7
3641		Engine electrical equipment	110	38.0	90	17.0
	1640*	Automotive electrical equipment [excludes propulsion-type motors and generators] (see 3641) *			90	17.0
3651	1650	Electric lamps	62	21.6	55	9.6
3661		Radios and related products	857	142.5	305	45.5
	1395*	Minerals: ground or treated [mica radio parts] (see 3295, 3299)			3	.2
	1661*	Radios, radio tubes, and phonographs [excludes radio tubes, phonograph records] (see 3579, 3662, 3663) *			179	30.6
	1662*	Communication equipment [radio parts] (see 3664, 3669) *			123	14.7
3662		Electronic tubes	51	22.6	26	11.3
	1661*	Radios, radio tubes, and phonographs [radio tubes] (see 3579, 3661, 3663)			19	11.2
	1692*	X-ray and therapeutic apparatus [nonradio electronic tubes, except X-ray] (see 3603)			7	.1
3663		Phonograph records	111	8.2	24	.9
	1661*	Radios, radio tubes, and phonographs (see 3579, 3661, 3662)			24	.9
3664		Telephone and telegraph equipment	90	53.6	43	14.4
	1662*	Communication equipment (see 3661, 3669)			43	14.4
3669		Communication equipment, n.e.c.	101	7.8	62	2.9
	1662*	Communication equipment [excludes radio parts, and telephone and telegraph equipment] (see 3661, 3664)			62	2.9
3691		Storage batteries	246	13.6	190	9.6
	1691*	Batteries, storage and primary (see 3692)			190	9.6

See footnotes at end of table.

INDUSTRY CLASSIFICATION			1947		1939	
1947 Code	1939 Code	TITLE	Number of estab- lishments	Production workers	Number of estab- lishments	Production workers
MAJOR GROUP 36—ELECTRICAL MACHINERY: EQUIPMENT, AND SUPPLIES						
—Continued						
3602		Primary batteries (dry and wet).....	38	9.2	31	5.5
	1691*	Batteries, storage and primary (see 3691).....			31	5.5
3693		X-ray and therapeutic apparatus.....	116	5.6	77	1.9
	1692*	X-ray and therapeutic apparatus [excludes nonradio electronic tubes, except X-ray] (see 3662).....			77	1.9
3699	1699	Electrical products, n.e.c. ¹¹	127	7.4	166	4.9
MAJOR GROUP 37—TRANSPORTATION EQUIPMENT						
3717		Motor vehicles and parts.....	963	558.7	942	288.1
	1810*	Motor vehicles, bodies and parts (see 3713, 3715) ⁴				
3713		Truck and bus bodies.....	603	22.9		
	1810*	Motor vehicles, bodies and parts (see 3715, 3717).....				
3715		Truck trailers.....	119	9.4	99	4.0
	1810*	Motor vehicles, bodies and parts (see 3713, 3717) ⁴			99	4.0
3716	1820	Automobile trailers ⁴	219	8.3	87	1.5
3721		Aircraft.....	58	110.3	44	34.2
	1921*	Aircraft and parts (see 3722, 3723, 3729) ⁴			44	34.2
3722		Aircraft engines.....	57	35.9	20	9.4
	1921*	Aircraft and parts (see 3721, 3723, 3729) ⁴			20	9.4
3723		Aircraft propellers.....	13	4.8		
	1921*	Aircraft and parts (see 3721, 3722, 3729).....			67	5.2
3729		Aircraft equipment, n.e.c.	204	11.6		
	1921*	Aircraft and parts (see 3721, 3723) ⁴				
3731	1931	Ship building and repairing ¹²	301	114.7	608	69.2
3732	1932	Boat building and repairing ¹²	809	17.3		
3741	1911	Locomotives and parts ⁴	36	25.4	20	7.0
3742		Railroad and street cars.....	86	50.3	48	17.7
	1912*	Railroad and street cars (see 3591, n.m.) ⁴			48	17.7
3751	1941	Motorcycles and bicycles.....	76	13.7	36	7.0
3799	1999	Transportation equipment, n.e.c.	167	3.9	41	1.3
MAJOR GROUP 38—INSTRUMENTS AND RELATED PRODUCTS						
3811		Scientific instruments.....	216	15.0	125	6.5
	2011*	Professional and scientific instruments (see 3821) ⁴			125	6.5
3821		Mechanical measuring instruments.....	463	40.9	227	15.1
	1460*	Steam fittings [thermostats, gages] (see 3591).....			49	4.9
	1765	Measuring instruments, mechanical ⁴			87	7.0
	2011*	Professional and scientific instruments (see 3811).....			91	3.2
3831	2013	Optical instruments and lenses ¹¹	114	5.2	31	2.2
3841	2021	Surgical and medical instruments ⁴	139	5.8	61	1.9
3842	2022	Surgical appliances and supplies.....	628	16.7	360	5.5
3843	2023	Dental equipment and supplies.....	213	7.1	131	4.2
3851	2014	Ophthalmic goods.....	184	19.7	91	10.3
3861	2012	Photographic equipment ¹¹	366	56.2	180	16.4
3871		Watches and clocks.....	194	30.2	64	17.3
	1541*	Watches and clocks [excludes time stamps] (see 3579) ⁴			64	17.3
3872	1542	Watchcases.....	82	4.9	42	2.4
MAJOR GROUP 39—MISCELLANEOUS MANUFACTURING INDUSTRIES						
3911	1551	Jewelry, precious metal.....	1,344	20.6	886	11.4
3912	1552	Jewelers' findings.....	182	5.2	82	2.5
3913	1553	Lapidary work.....	270	1.5	90	.3
3914	1561	Silverware and plated ware ⁴	235	18.5	153	13.2
3931	2031	Pianos.....	27	6.2	35	5.3
3932	2032	Organs.....	27	1.1	57	2.3
3933	2033	Piano and organ parts.....	37	2.9		
3939	2039	Musical instruments, n.e.c.	169	4.6	101	3.2
3941		Games and toys, n.e.c.	837	24.2	294	13.8
	2041*	Games and toys, n.e.c. [excludes stuffed animals] (see 3942) ⁴			294	13.8
3942		Dolls.....	377	8.9	136	4.9
	2041*	Games and toys, n.e.c. [stuffed animals] (see 3941).....			52	1.8
	2042	Dolls.....			84	3.1
3943	2043	Children's vehicles.....	120	7.8	44	4.3
3949	2049	Sporting and athletic goods.....	864	26.4	350	13.8
3951	2051	Pens and mechanical pencils.....	184	12.5	70	4.5
3952	2052	Lead pencils and crayons.....	50	5.2	40	3.8
3953	2053	Hand stamps and stencils.....	426	3.5	289	2.2
3954	2054	Artists' materials.....	60	1.0	42	.4
3955	2055	Carbon paper and inked ribbons.....	67	2.6	58	1.7

See footnotes at end of table.

INDUSTRY CLASSIFICATION			1947		1939	
1947 Code	1939 Code	TITLE	Number of establishments	Production workers	Number of establishments	Production workers
		MAJOR GROUP 39—MISCELLANEOUS MANUFACTURING INDUSTRIES—Continued				
3961		Costume jewelry.....	859	22.3	209	12.2
	2071	Costume jewelry.....			289	10.8
	2072*	Jewelry and instrument cases [compacts, cigarette cases, vanity cases—not precious metal] (see 3986).....			8	
	2099*	Miscellaneous products, n.e.c. [cigarette lighters] (see 3964, 3999).....			2	1.4
3962	2074	Artificial flowers.....	445	6.6	314	6.7
3963	2061	Buttons.....	453	9.4	316	11.0
3964		Needles, pins, and fasteners.....	277	19.3	79	11.1
	2083*	Beauty and barber-shop equipment [hair curlers] (see 3961).....			9	.5
	2095	Needles, pins, and fasteners.....			59	10.4
	2099*	Miscellaneous products, n.e.c. [buckles, except shoe] (see 3961, 3999).....			11	.2
3971	2086	Plastics products, n.e.c.....	1,300	51.6	216	15.1
3981		Brooms and brushes.....	706	15.5	565	11.7
	2081	Brooms.....			320	3.8
	2082	Brushes.....			245	7.9
3982	692	Cork products.....	36	2.2	35	2.9
3983	693	Matches.....	29	6.6	28	5.4
3984	694	Candles.....	54	1.9	28	.8
3985	693	Fireworks and pyrotechnics.....	73	3.0	59	1.2
3986		Jewelry and instrument cases.....	165	6.7	124	4.1
	2072*	Jewelry and instrument cases [excludes compacts, cigarette cases, vanity cases] (see 3961).....			124	4.1
3987	2073	Lamp shades.....	291	4.1	128	2.7
3988	671	Morticians' goods.....	568	18.2	599	12.4
3991		Beauty and barber-shop equipment.....	70	3.2	71	1.8
	1451*	Cutlery and edge tools [hair clippers for human use] (see mainly 3421, 3422, 3621).....			7	.3
	2083*	Beauty and barber shop equipment (see 3964).....			64	1.5
3992		Furs, dressed and dyed.....	175	6.1	136	5.0
	2084*	Furs, dressed and dyed [excludes hair and bristles, dressed] (see 3999).....			136	5.0
3993	2085	Signs and advertising displays.....	1,083	24.3	1,386	17.2
3994	2093	Hair work.....	87	1.0	42	.3
3995	2087	Umbrellas, parasols, and canes.....	104	3.3	90	2.9
3996	2088	Tobacco pipes.....	76	2.7	32	2.5
3997	2091	Soda-fountain and bar equipment.....	67	2.2	51	1.6
3998		Models and patterns (except paper).....	209	1.7	112	1.2
	2092*	Models and patterns, except paper [excludes patterns for industrial use] (see 3550).....			112	1.2
1951	1497	Small arms.....	34	9.2	23	5.0
1961	088	Small arms ammunition.....	8	6.7	13	4.3
3999		Miscellaneous products, n.e.c.....	666	16.9	611	14.9
	1593*	Aluminum products, n.e.c. [tags] (see mainly 3352, 3361, 3463).....			6	.1
	2084*	Furs, dressed and dyed [hair and bristles, dressed] (see 3992).....			9	.2
	2094	Wool pulling.....			17	.8
	2096	Fire extinguishers, chemical.....			28	1.0
	2099*	Miscellaneous products, n.e.c. (see 3961, 3964).....			551	12.8
		ESTABLISHMENTS EXCLUDED FROM SCOPE OF 1947 CENSUS				
n.m.		Total.....			10,420	78.4
	111*	Meat packing, wholesale [jobbers] (see 2011, 2013).....			33	.1
	124*	Ice cream and ices [retail stores] (see 2024).....			38	.3
	151*	Bread and other bakery products [retail bakeries] (see 2051).....			7,718	21.3
	611	Logging camps and logging contractors.....			907	22.8
	1340*	Cement, hydraulic [quarry departments of combined quarrying and processing plants] (see 3241).....				3.6
	1371*	Concrete products [ready-mixed concrete] (see 3271).....			149	1.9
	1375*	Lime [quarry departments of combined quarrying and processing plants] (see 3274).....				3.3
	1380*	Cut-stone and stone products [combined quarrying and processing plants] (see 3281).....			152	6.7
	1770*	Machine-shop repairs [repair only] (see 3599).....			1,261	7.9
	1912*	Railroad and street cars [repair shops] (see 3742).....			103	10.5
		Other nonmanufacturing establishments.....			8	(7)

¹ The 1947 industry classification excludes establishments engaged in the distribution of fluid milk or cream, and manufacturing other dairy products; the manufacturing departments of these establishments were covered in the 1939 census and are included in the 1939 figures.

² Data for 1939 include some establishments primarily engaged in packing dried fruits; these establishments, which accounted for a substantial proportion of total number of production workers in 1939, were excluded in 1947.

³ Data for 1939 do not include bottling departments of establishments primarily engaged in distilling, rectifying, and blending liquors, except brandy; data for these departments are included in 1947 statistics.

⁴ Includes adjustment for establishments reclassified into the specified 1939 industry.

⁵ Industry 2099 includes coffee roasting and spice roasting and grinding establishments in 1947; they were not included as manufacturing in 1939.

⁶ Not included as manufacturing in the 1939 census.

⁷ Less than 50 production workers.

⁸ No 1939 schedules were classified into this 1947 census industry.

⁹ No 1939 or 1947 schedules were classified into this industry.

¹⁰ Establishments primarily making restaurant furniture are not identifiable from 1939 schedules, and are probably included mainly in industries 2521, 2522, and 2541 in 1939.

¹¹ 1939 data revised.

¹² 1947 census industry 3731 differs from 1939 industry 1931 in that the former defines ships as vessels more than 65 feet in length; the latter, 5 gross tons and over. Census industry 3732 defines boats as vessels 65 feet or less in length; industry 1932, less than 5 gross tons.

APPENDIX E

COMPARISON OF 1947 CENSUS AND STANDARD INDUSTRIAL CLASSIFICATION SYSTEMS

Except for the relatively minor modifications indicated below, the Standard Industrial Classification (SIC) system for manufacturing industries (Major Groups 19-39) was used as the basis for defining the scope and content of the manufacturing industries in the 1947 Census of Manufactures. Census statistics for total manufacturing exclude certain types of establishments considered to be manufacturing, and include some establishments considered to be nonmanufacturing by the Standard Industrial Classification. Some products were included by the Census in industries different from those shown in the Standard Industrial Classification. In the Census, some SIC industries were broken down into subindustries, others were combined, and a number were rearranged into different industry groups from those of the Standard Industrial Classification.

Scope of manufactures—Establishments primarily engaged in making the products or performing the services listed below, which are classified as manufacturing by SIC, are excluded from the scope of the 1947 census (asterisk following SIC industry code indicates part of the industry):

2294*	Wiping cloths
2511	Logging camps and logging contractors
3281*	Cut-stone and stone products establishments operated in conjunction with quarries
2863*	Fire-distilled gum naval stores
3714*	Rebuilt motor vehicle parts
3732*	Small establishments (less than 10 employees) repairing boats and not primarily engaged in other manufacturing activity

Establishments owned and operated by the United States Government, particularly ordnance plants, Navy Yards, printing establishments, and Quartermaster depots making certain types of clothing, were not included in the 1947 census.

Census statistics for total manufacturing include data for certain textile-mill, apparel, and leather tanning jobbers who do no manufacturing but who assign materials to contract mills or factories for fabrication. These establishments were covered mainly to obtain more complete data on value of product shipments, cost of materials, and value added

by manufacture for the corresponding manufacturing industries.

Reports were collected and tabulated for dairy products establishments also engaged in the distribution of fluid milk or cream, which are classified as nonmanufacturing by SIC. Industry data for these establishments are shown separately but are not included in the totals for manufacturing establishments. Similarly, data for the motion pictures industry are shown separately but are excluded from manufacturing totals.

Products included in different industries by Census and SIC—Deviations of 1947 Census of Manufactures from SIC industry classifications were based largely upon information derived from further analysis of 1939 Census of Manufactures data, Census current surveys, and suggestions from other government agencies and representatives of industry. The products listed below are included in 1947 Census industries different from those assigned according to the industry descriptions or the alphabetic index of the Standard Industrial Classification Manual, Volume I, Parts 1 and 2.

Product	Industry In Which Included SIC	Census
Sausage casings:		
Natural (animal)	2014	2013
Synthetic (cellulose)	2014	2825
Canned poultry and chicken soup	2015	2033
Processed cheese	(¹)	(¹)
Brandy and brandy spirits	2085	2084
Minced meat	2099	2033
Sandwich spread, salad dressing base	2099	2035
Tire cord, not woven	2221	2233
Metal household furniture, upholstered	2514	2512
Nonmetallic mineral products, n.e.c.	(¹)	3299
Mica laminates	3295	3299
Hair clippers, electric:		
Animal use	3421	3522
Human use	3421	3991
Electric shavers	3421	3621
Powder metallurgy products	3464	(¹)
Portable electric woodworking tools	3553	3542
Merry-go-rounds and other amusement rides ..	3569	3999
Autographic registers	3571	3579
Mica electrical insulators	3611	3299
Turbo-generators powered by steam or water power	3614	3511
Electric soldering irons	3621	3619
Propulsion-type automotive electric motors and generators	3641	3614
Nonradio electronic tubes, except X-ray	3693	3662
Appliance cords	3699	3631

<i>Product</i>	<i>Industry In Which Included SIC</i>	<i>Census</i>
Trucks and busses made from purchased chassis	3711	3713
Truck and bus bodies for motor vehicle producers	3713	* 3717
Cigar and cigarette cases, vanity cases, compacts (not precious metal)	3986	3961
Beauty-shop and barber-shop furniture (except hydraulic chairs)	3991	2532
Industrial patterns and molds (for foundry, plastic, etc., machinery use) ⁶	3998	3559
Cigar and cigarette lighters (not precious metal)	3999	3961

¹ Establishments primarily manufacturing processed cheese in a continuous operation from purchased milk, and not shipping natural cheese, are classified by Census in Industry 2025 and by SIC in Industry 2022; those also shipping natural cheese are classified by both Census and SIC in Industry 2022.

² Subindustry of SIC Industry 2231, Broad-woven fabric mills (cotton, silk, and synthetic fiber).

³ Industry 3299 is a Census industry classification covering establishments primarily engaged in manufacturing exfoliated vermiculite, magnesite floor composition, mica products (except mica radio parts), and other non-metallic mineral products, not elsewhere classified.

⁴ Establishments are classified according to products made rather than process used in manufacturing.

⁵ Industry 3717 is a Census industry classification including part of SIC Industry 3711, Motor vehicles (except trucks made from purchased chassis); Industry 3712, Passenger-car bodies; truck and bus bodies for sale to motor-vehicle producers, from Industry 3713, Truck and bus bodies; and Industry 3714, Motor-vehicle parts and accessories.

⁶ Selected general statistics are shown separately in the Industry Volume under Census Industry 3559 for establishments primarily engaged in manufacturing industrial patterns and molds.

The Census definitions of Industries 3731, Ship building and repairing, and 3732, Boat building and repairing, differ from the SIC definitions by distinguishing ships from boats on the basis of length of vessel rather than gross tonnage. Census defines ships as vessels more than 65 feet in length, and boats, 65 feet or less in length, in contrast to the SIC dividing line of 5 gross tons and over for ships, and less than 5 gross tons for boats.

Rearrangement of SIC industries by Census—A number of industries were arranged into industry groups different from that of SIC. Statistics for Industries 1951, Small arms, and 1961, Small arms ammunition, the only two of the nine industries of SIC Major Group 19 covered in this Census (the other industries consist primarily of Government-owned and operated establishments) are included in Industry Group 399. A new 3-digit Industry Group 221 was formed from the following industries, each of which falls into a different SIC industry group:

<i>SIC Code</i>	<i>Title</i>	<i>Census Code</i>
2211	Scouring and combing plants	2211
Pt. 2221	Yarn mills, wool, except carpet	2212
2232	Woolen and worsted fabrics	2213
2262	Finishing wool textiles	2216

Combinations of SIC industries—Following is a list of instances where two or more whole SIC industries were combined to form a single Census industry:

<i>SIC Industry</i>	<i>Census Industry</i>
2011 Meat packing, wholesale	2011 Meat packing, wholesale
2012 Custom slaughtering, wholesale	
2296 Linen goods	2297 Jute (except felt), and linen goods
2297 Jute goods (except felt)	
2811 Sulfuric acid	2819 Industrial inorganic chemicals, n.e.c.
2819 Industrial inorganic chemicals, n.e.c.	
2822 Intermediates, dyes, color lakes, and toners	2829 Industrial organic chemicals, n.e.c.
2829 Industrial organic chemicals, n.e.c.	
2864 Natural dyeing materials	2865 Natural tanning and dyeing materials
2865 Natural tanning materials	
3335 Primary refining of magnesium	3339 Primary nonferrous metals, n.e.c.
3339 Primary smelting and refining of nonferrous metals, n.e.c.	
3462 Automobile stampings	3463 Metal stampings
3463 Stamped and pressed metal products (except automobile stampings)	
3575 Vending, amusement, and other coin-operated machines	3579 Office and store machines, n.e.c.
3579 Office and store machines and devices, n.e.c.	
Pt. 3711 Motor vehicles (except trucks and busses made from purchased chassis)	3717 Motor vehicles and parts
3712 Passenger-car bodies	
Pt. 3713 Truck and bus bodies (for sale to motor vehicle producers)	
3714 Motor-vehicle parts and accessories	

Subindustries—A number of SIC industries were broken down into subindustries as indicated below. Data for these subindustries are shown separately in each of the General Summary, Industry, and State Volumes; data are not shown for the corresponding original whole SIC industries. Following is a list of Census subindustries and their codes; these are shown indented under their respective SIC industries:

<i>SIC Industry</i>	<i>Subindustry</i>
2099 Food preparations, n.e.c. -----	2090 Liquid, frozen, and dried eggs
	2099 Food preparations, n.e.c.
2221 Yarn mills -----	2224 Yarn mills, cotton system
	2225 Yarn mills, silk system
	2212 Yarn mills, wool system, except carpet
2231 Broad-woven fabric mills (cotton, silk, and synthetic fiber) {	2233 Cotton broad-woven fabrics
	2234 Rayon and related broad-woven fabrics
2337 Women's and misses' suits, coats (except fur coats), and {	2335 Women's suits and coats
skirts -----	2336 Women's skirts

Selected statistics for breakdowns of each of the following SIC industries are shown only in the Industry Volume; data for the original whole SIC industries are shown in each of the Census volumes:

<i>SIC Industry</i>	<i>Industry Breakdown</i>
2051 Bread and other bakery products (except biscuit, crackers, and pretzels) -----	Bakeries selling primarily to grocers
	Bakeries selling primarily to hotels, restaurants, and institutions
	Retail multi-outlet bakeries
	Bakeries selling primarily through house-to-house routes
	Grocery chain bakeries
2298 Cordage and twine -----	Hard fiber cordage and twine
	Soft fiber, except cotton, cordage and twine
	Cotton cordage and twine
2751 Commercial printing -----	Commercial printing, except gravure (noncaptive plants)
	Gravure printing (noncaptive plants)
	Commercial printing (captive plants)
2761 Lithographing -----	Lithographing (noncaptive plants)
	Lithographing (captive plants)
2911 Petroleum refining -----	Refining crude petroleum and petroleum products
	Re-refining used oils